

Challenges and Opportunities in Achieving the National Postsecondary Degree Attainment Goals

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POLICY INFORMATION REPORT



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RESEARCH REPORT

Challenges and Opportunities in Achieving the National Postsecondary Degree Attainment Goals

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In 2009, at the end of the 12-month Great Recession in the United States, the U.S. government established a college degree attainment goal for 60% of 25- to 34-year-olds to earn an associate's or bachelor's degree by the year 2020. In the same year, Lumina Foundation set a similar goal for 60% of 25- to 64-year-olds to earn a high-quality certificate, associate's degree, or bachelor's degree by the year 2025. Both the U.S. government's and Lumina Foundation's goals intend to place the United States in a leadership position in the global massification of postsecondary education that has evolved over the past few decades and to address the growing labor market demands for postsecondary education and training. This report provides a view of current progress and forecasts of the nation's long-term progress toward achieving the goals. The analyses in this report represent college degree attainment performance of the U.S. population by race/ethnicity and gender and project through 2060. The projections reveal that neither goal is expected to be reached by target dates for the targeted adult populations, but the associate's and bachelor's degree attainment rates of the Asian American population are already beyond the 60% target and the White population, overall, is approaching at a pace to arrive a few years beyond the target year 2020 established by the U.S. government and 2025 set by Lumina Foundation. The projections for the African American, American Indian/Alaska Native, and Hispanic populations are not promising. Unless aggressive actions are taken to address the inequalities in each level and type of degree, and especially bachelor's and higher degrees, not only will the three underserved population groups (African American, American Indian/Alaska Native, and Hispanic) fail to reach the goals in the foreseeable future, but also the progress that they make could be overrepresented by lower status degrees and certificates and in turn lower status occupations. Each of these three underrepresented population groups may require targeted and tailored initiatives to make substantive progress toward a larger share being college and career ready and ultimately persisting toward and attaining college degrees. The report includes data and analyses that could be useful in designing interventions.

Keywords Degree attainment; degree attainment projections; national attainment goals; postsecondary education; racial/ethnic groups; underrepresentation; policy recommendations; labor force

doi:10.1002/ets2.12141

With the nation's growing demand for a more highly educated and skilled workforce, postsecondary degrees and credentials have shifted from being a commodity reserved for the privileged few to an urgent necessity for a broader cross section of the U.S. population (Carnevale, Smith, & Strohl, 2010). Current education and labor policy objectives of the United States include gaining and sustaining global preeminence in higher education and the workforce. Specifically, the recent objectives of the nation have been to reclaim the position of being the country with the largest share of its adult population earning college degrees and ensuring that college graduates are adequately prepared to succeed in contemporary labor markets. The nation's education policy objectives have placed emphasis on raising the quality of education in the nation's K-12 schools to better prepare students for college and careers and to increase degree attainment among the U.S. adult population.

In his first speech to a joint session of Congress on February 24, 2009, President Obama announced his goal for the United States to "once again" have a larger proportion of its population completing college than other nations around the world (Obama, 2009). Degree attainment goals that were subsequently set by the Obama administration and Lumina Foundation reflect an effort to align higher education policy with current and emerging labor market demands and forecasts. The White House (n.d.) promoted the government's goal and trumpeted its workforce relevance, stating that "[e]arning a postsecondary degree or credential is no longer just a pathway to opportunity for a talented few; rather, it is a prerequisite for the growing jobs of the new economy." Similarly, Lumina Foundation (2013) described the urgency of

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its goal, stating that "[f] or many years, the main reason many people went to college was to gain access to better-paying jobs that allowed them to earn more throughout their lives. But earnings potential is no longer the only driver. In this economy, the issue is whether you even *have* a job." The U.S. Bureau of Labor Statistics (2015) reported that 11 of the 15 fastest growing occupations in the United States require some level of postsecondary education and that nine of them require an associate's or bachelor's degree.

The national degree attainment goal that emerged from the government set as a target for 60% of the nation's adult population between the ages of 25 and 34 to have earned a 2-year or 4-year college degree by the year 2020 (U.S. Department of Education, 2012b). Based on the same premise of contemporary workforce and socioeconomic advancement, Lumina Foundation (2009, 2016) established a similar degree attainment goal of 60%, but it is different from the federal government's goal in the following three ways: (a) Instead of the federal government's age range of 25–34, Lumina Foundation's age range is 25–64, which includes a much larger share of the working adult population; (b) instead of only including associate's and bachelor's degrees, as the federal government's goal does, Lumina Foundation's goal also includes high-quality postsecondary certificates; and (c) whereas the federal government's goal achievement aim is the year 2020, Lumina Foundation set the target 5 years later, at 2025.

Both the federal government's and Lumina Foundation's goals were established in 2009, the last year of the Great Recession. The goals reflect the anticipated growing demand for a larger share of the postrecession workforce to have completed postsecondary education and training. Indeed, Carnevale, Jayasundera, and Gulish (2016) reported that 99% of new jobs during the past 6 years of economic recovery have been filled by college graduates. But, although the federal government and Lumina Foundation have set these goals with intentions of increasing national degree attainment, the goals comprise the characteristics of a moonshot (Teller, 2013). They have ambitious and seemingly arbitrary timelines, they pertain to diverse U.S. populations with different levels of degree attainment, they are dependent on the production of a complex system of higher education institutions, and they lack specificity about labor market aims and major fields. Furthermore, neither goal is accompanied by strategies that provide assurance of on-time arrival for the overall population or the various segments of the population.

So while labor market demands are a compelling rationale for the government and Lumina Foundation, the goals do not target specific high-need occupations within the broad labor market. Instead, the degree attainment goals appear to aim to cover the broad landscape of the labor market and the broad array of higher education degree fields. Even though people who have earned postsecondary degrees appear to have an overwhelming advantage in gaining access to new jobs, evidence about the quality of their fit and suitability for contemporary jobs and their performance and success in the new jobs also need to be established.

It has been 8 years since the Obama administration and Lumina Foundation set their degree/credential attainment goals and began investing in monitoring progress toward achieving the goals (Lumina Foundation, 2009, 2015, 2016; U.S. Department of Education, 2016). This report examines the relative progress and the trajectories of the U.S. population overall and its various major population groups toward achieving the goals. The report also addresses the challenges the nation confronts as it progresses toward the 60% goals, proposing strategies for meeting the goals overall and for each major population group.

The report is organized into six sections, including this introductory section. The following section of the report explores the population and workforce equity context in which goals are being pursued, setting forth the rationale for detailed analyses and projections by gender and race/ethnicity in the U.S. population. The third section presents degree attainment projections for each major population group and for the two age spans corresponding to the U.S. government's and Lumina Foundation's goals. This section estimates the relative rate of increased college degree production that will be required for each major population group to reach the degree attainment goals. The fourth section presents analyses of the data, disaggregated by various levels/types of degrees and credentials (associate's, bachelor's, and certificates), showing the contribution of each type of degree/credential toward meeting attainment goals and toward assessing the status of each population group on each type of degree and credential. The fifth section examines the condition of the postsecondary pipeline leading to degree attainment for the various U.S. population groups. The focus is on the pool of prospective college students, the degree expectations of that pool when they are still in high school, and their productivity and efficiency from entry into and persistence through timely postsecondary degree completion. The report closes with a discussion of the alignment between President Obama's setting of educational goals and similar actions by prior U.S. presidents, and the seemingly unprecedented complementary initiative by a large national philanthropic institution, namely, Lumina

Table 1 Current Population and Rate of Associate's and Bachelor's Degree Attainment: Ages 25-34 and 25-64

	25- to 34-ye	ear-old population	25- to 64-ye	ar-old population
Group	Population in 2014	Degree attainment rate in 2014 (%)	Population in 2014	Degree attainment rate in 2014 (%)
U.S. population	43,279,253	42.3	167,593,630	40.4
African American ^a	5,665,337	29.0	20,625,035	29.3
American Indian/Alaska Nativeb	285,226	21.0	1,085,821	23.6
Asian ^c	2,875,013	68.4	9,915,284	60.8
Hispanic ^d	8,448,047	21.9	26,294,580	21.1
White ^e	24,638,335	49.6	105,869,394	45.7

Note. nec = not elsewhere categorized. The data for races exclude Hispanic, and race combination is not included. Data are from the American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/. 2014 was the most recent data available at the time of writing.

^aIncludes all Black non-Hispanic population. ^bIncludes all American Indians and Alaska Natives non-Hispanic population. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander. Does not include other race, nec, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec, population. Does not include two major races; three or more races. ^cIncludes all White non-Hispanic population.

Foundation. The conclusion also describes a forthcoming report by the author and his colleagues (Nettles, 2017) that will explore academic preparation as being among the keys to achieving these degree attainment goals in a way that is inclusive of the growing racial and ethnic diversity of the U.S. population. That report gives particular attention to the actions that need to be taken to ensure that the U.S. population is better prepared for college admission and success.

This report addresses both the U.S. government's degree attainment goal of 60% of 25- to 34-year-olds by 2020 and Lumina Foundation's target of 60% of 25- to 64-year-olds by 2025. With the exception of the Asian American population in both age groups (see Table 1, Columns 2 and 4), the overall U.S. population and various racial/ethnic groups require substantial progress to reach 60% degree attainment. The data and analyses presented in the third section of this report make it clear that the African American, American Indian/Alaska Native, and Hispanic populations are too far away from the national degree attainment goals set by the federal government and Lumina Foundation for 2020 and 2025, respectively, and elucidate the enormous effort required for them to make substantial progress (see Table 1).

The two goals are examined separately because each illuminates a different dimension of the challenges confronting the United States as it seeks to produce a contemporary competitive labor force. In addition, should a future presidential administration decide to set aside the existing national government's degree attainment goals in favor of different policies and strategies, Lumina Foundation's philanthropic efforts are likely to remain a force helping to raise attention and provide support to states and higher education and public policy institutions for their efforts to meet future labor market demands by closing degree attainment gaps. Both goals can be good for the nation because they provide a general indication of the value that postsecondary education has for the sustainability of society. But much of the value in the goals lies within the lessons gleaned from pursuing them, including the need for greater inclusion of the diverse population, and the challenges involved in engaging and mobilizing the diverse collection of the nation's colleges and universities toward achieving national goals. Herein lie two challenges and opportunities: first, to include the broad spectrum of colleges and universities and the diverse population in pursuit of postsecondary degree attainment goals; and second, to increase the diversity of the nation's colleges and universities and in turn the college-educated workforce. The following section addresses these equity challenges by examining the degree attainment goals in light of the race equity challenges in higher education and the workforce.

Equity Context in Pursuing College Degree Attainment Goals

Producing an abundance of degrees and credentials by 2020 and 2025 might possibly represent preeminence and global leadership for U.S. postsecondary institutions. But declaring victory for the nation's economy and society will depend less on surpassing foreign nations than on the extent to which the following three outcomes are achieved: (a) underserved and chronically trailing population groups within the United States are closing gaps in educational attainment, (b) the

broad array of the nation's colleges and universities and major fields are contributing to the degree production and quality assurance progress, and (c) leading U.S. colleges and universities and the workforce make substantial gains in increasing their racial/ethnic diversity.

The degree attainment goals of both the federal government and Lumina Foundation are ambitious for the nation's population overall, but they are especially challenging for the racially, ethnically, and socioeconomically underserved segments of the U.S. population. The goals could be achieved simply by raising the college degree attainment of only the White¹ population. A looming question is whether the degree attainment goals should be achieved by substantially elevating the majority population alone or whether achievement should also include a substantial share of the growing diverse population of African Americans, American Indians/Alaska Natives, and Hispanics, which is now more than one third of the nation's population and is growing faster than the White population.

Asian Americans also compose a growing share of the U.S. population, approaching 6% (U.S. Census Bureau, 2015). African Americans, American Indians/Alaska Natives, and Hispanics combine to compose more than one third of the nation's population. These latter three groups are overrepresented among disadvantaged populations, and they require substantially more progress than both the Asian American and White populations in order to contribute substantially to achieving the nation's degree attainment goals. A key question, the answer to which could have vital social consequences, is when the time arrives for the nation to celebrate achieving the national degree attainment goals, will the Asian American and White populations continue being as overrepresented as they are presently among people with high-status college degrees, while the other three adult populations remain severely underrepresented?

The U.S. Department of Education (2012a, 2016) estimated that the nation needed 50% more of its 25- to 34-year-old population to attain an associate's or bachelor's degree to achieve the federal government's goal. The U.S. Department of Education has not indicated what each of the racial/ethnic groups needs to accomplish to reach or contribute substantially to the overall degree attainment goal. The government also has not indicated the anticipated role and contribution of various types of colleges and universities or particular major fields toward reaching the overall degree attainment goal. Given that major population groups are at different places on the degree attainment continuum, each group requires different size gains to reach the goals and to play a key role in ensuring that the nation achieves the goals. Setting and monitoring the same high goals for each population group is also needed to ensure that the labor market includes people from underserved populations in high-demand fields that require postsecondary credentials and degrees. Data and analyses presented later in this report reveal that a little over a 25% increase in degrees among the White population is required for that group to reach degree attainment goals, but a much greater increase is required for African American, Hispanic, and American Indian/Alaska Native segments of the population (over 100% each).

At 60%, the goals presently do not represent a challenge for Asian Americans as a population group, because as shown in the following section and the remainder of this report, Asian American men and women have already surpassed the goals. Three quarters of the nation's Asian American population is foreign born and relatively highly educated (Pew Research Center, 2013). Given the rapid growth of the Asian American population and the potential changes in the composition, status, and educational attainment of the immigrant Asian and second- and third-generation Asian American populations over the next several decades, the nation will need to continue monitoring the degree attainment trajectory of this population group. Focusing only on achieving degree attainment goals for the overall U.S. population without paying attention to race and gender groups and the growing diversity of the population places the nation at risk of further exacerbating existing inequities in higher education and the workforce. It also places African American, American Indian/Alaska Native, and Hispanic population groups at risk of losing more education and economic ground as the nation moves forward toward achieving the goals. To prevent these gaps in achievement and attainment from widening, populations that are lagging behind in education and the workforce need to be placed at the heart of efforts to increase college and career readiness and degree attainment.

The educational attainment of African American, American Indian/Alaska Native, and Hispanic population groups reflects their lingering process of overcoming a tumultuous history in the United States that has included enslavement and the ongoing struggles for freedom, citizenship, social justice, and equality in education and the workforce. Given that workforce supply and demand are a leading purpose for establishing national degree attainment goals, a few key basic labor market indicators are useful for illustrating the racial equity challenge that the nation faces. Three key indicators are (a) unemployment rates by educational attainment, (b) participation rates, and (c) employment by occupational field. Unemployment rates by educational attainment are a gauge of the relationship of degree attainment to employment, and

employment by field is a gauge of the relationship of postsecondary education's production and training to the demands in the workforce. Participation rates show the share of the population that is not in the workforce.

Unemployment

Unemployment for the overall population and among the racial/ethnic groups declines as people progress through successive levels of degree attainment. The 25- to 34-year-old age group ranges from 8% overall unemployment among people with high school diplomas down to under 3% for people with bachelor's degrees and higher, and the 25- to 64-year-old age group ranges from 6% unemployment for high school graduates to 3% unemployment for those with bachelor's degrees (see Tables 2 and 3).

Unemployment rates vary by race/ethnicity, and the African American population experiences the least favorable rates. For example, African Americans comprised roughly 12% of both the 25- to 34-year-old and 25- to 64-year-old populations in 2015, and yet they represented 25% of the unemployed 25- to 34-year-olds and 21% of the unemployed 25- to 64-year-olds.

At nearly 8%, the African American population group shows the highest unemployment rate among 25- to 34-year-olds having an associate's degree and, at nearly 5%, the highest unemployment rate among 25- to 34-year-olds with a bachelor's degree. These unemployment rates for the African American population are nearly double the overall unemployment rates at these two degree levels. Among 25- to 64-year-old associate's and bachelor's degree holders, African American unemployment rates are 6% and 4%, respectively, rates which are also higher than the overall unemployment rates at those degree attainment levels. The bachelor's degree level, however, is where the African American population approaches a level of employment status that nearly resembles its representation in the United States. Among people with bachelor's degrees, African Americans represent 15% of the unemployed 25- to 34-year-olds and 13% of the unemployed 25- to 64-year-olds.

The unemployment rate for the Hispanic population among both 25- to 34-year-olds and 25- to 64-year-olds with associate's degrees is 4%, which is very close to the rates of the overall population of associate's degree holders in the two respective age groups (at roughly 4% each). This unemployment rate is also close to the rates for White associate's degree holders, which are roughly 4% for 25- to 34-year-olds and 3% for 25- to 64-year-olds. The Hispanic population represents 21% and 17% of the two age groups in the U.S. population, respectively, and 17% and 14% of the unemployed, respectively. At the bachelor's degree level, the 4% unemployment rates across the two successive age groupings among Hispanics are also only slightly higher than the overall rates and are very similar to the 2% among White bachelor's degree holders.

The Asian American population also fares very well in employment rates. The Asian American unemployment rate at the associate's degree level is 2% among 25- to 34-year-olds and 3% for 25- to 64-year-olds, and the bachelor's degree level is at 3% for both.

Participation

A majority of individuals in these targeted two age groups participate in the labor market. Approximately 19% of the 25- to 34-year-old population and 23% of the 25- to 64-year-olds are not in the labor market. Over one quarter of Asian Americans (26%) in the 25- to 34-year-old group and 24% of 25- to 64-year-old Asian Americans are outside the workforce not looking for employment, compared to 21% and 27%, respectively, of African Americans; 22% and 24%, respectively, of Hispanics; and 17% and 22%, respectively, of Whites. Although many of these participation rates are similar across the racial/ethnic groups, they do not reveal the variations in the conditions and circumstances related to each representation in being outside the workforce, such as variations in human interaction, demographically based discrimination and treatment, residential proximity to employment opportunities, and personal health.

Employment in High-Demand and Growing Fields

The U.S. Census Bureau's American Community Survey (ACS) estimates employment status by race/ethnicity of the adult population in a variety of occupations and industries, including occupations that are projected to be in high demand of postsecondary graduates over the next several years through 2020 (Carnevale, Smith, & Strohl, 2013). Included among the high-demand fields and occupations² for people with college degrees are the following six: (a) nursing; (b) teaching;

Table 2 2015 Unemployment Rate by Race/Ethnicity and Educational Attainment, Ages 25-34

		Popu	Population characteristics	ristics		Unem	Unemployment rate by educational attainment (column percentage)	ग्र educational ६	attainment (co	olumn percen	tage)
Group	Population in 2015	Distribution of oppulation total population in 2015 (%)	Total unemployed	Rate not in labor force (column percentage)	Total unemployment rate (column percentage)	Less than high school diploma	High school diploma or equivalent	Some college, no degree	Associate degree	Bachelor's degree	Advanced degree
U.S. population African American ^a Asian ^b Hispanic ^c White ^d	42,771,000 5,493,000 3,137,000 8,762,000 24,322,000	100.0 12.8 7.3 20.5 56.9	1,905,000 481,000 83,000 430,000 832,000	19.0 (100.0) 20.8 (14.0) 26.1 (10.1) 21.7 (23.4) 16.6 (49.7)	5.5 (100.0) 11.1 (25.2) 3.6 (4.4) 6.3 (22.6) 4.1 (43.7)	11.4 (100.0) 30.0 (25.8) 4.9 (1.3) 7.9 (40.4) 11.5 (27.2)	8.1 (100.0) 14.9 (29.2) 4.7 (2.2) 7.5 (23.9) 6.2 (40.0)	6.5 (100.0) 10.4 (28.6) 5.5 (3.5) 6.0 (18.0) 5.3 (44.9)	4.4 (100.0) 7.5 (22.0) 2.0 (1.8) 4.4 (17.3) 3.9 (55.4)	2.7 (100.0) 4.5 (14.8) 3.2 (11.3) 3.5 (13.2) 2.3 (58.8)	2.3 (100.0) 4.7 (15.8) 2.5 (15.8) 3.4 (11.6) 1.9 (54.7)

Note. nec = not elsewhere categorized. Because the Current Population Survey is subject to sampling and nonsampling error, caution should be used when interpreting and comparing unemployment rates. The U.S. Census Bureau provides documentation for approximating standard errors for Current Population Survey data, which can be accessed online (http:// www.census.gov/prod/2006pubs/tp-66.pdf). Employment data on American Indians and Alaska Natives are excluded due to small sample size. Column percentages (calculated by authors) may not equal 100% due to rounding and because not all racial/ethnic groups are included. Data are from the U.S. Department of Labor, Bureau of Labor Statistics, using 2015 Current Population Survey (unpublished).

Includes all Black non-Hispanic population ages 25-34. ^bIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25-34. Does not include other race, nec, two major races, three or more major races. Includes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-34. Does not include two major races; three or more races. ^dIncludes all White non-Hispanic population ages 25-34.

Table 3 2015 Unemployment Rate by Race/Ethnicity and Educational Attainment, Ages 25-64

		Populatic	Population characteristics	tics		Unemp	loyment rate	Unemployment rate by educational attainment (column percentage)	attainment (c	column percei	ıtage)
Group	Population in 2015	opulation Distribution of in 2015 total population (%) u	Total unemployed	Rate not in labor force (column percentage)	Total unemployment Less than rate (column high school percentage) diploma	Less than high school diploma	High school diploma or equivalent	Some college, 1000 degree	Associate degree	Bachelor's degree	Advanced
U.S. population 165,702,000 African American ^a 20,140,000 Asian ^b 10,542,000 Hispanic ^c 27,517,000 White ^d 104,265,000	165,702,000 20,140,000 10,542,000 27,517,000 104,265,000	100.0 12.2 6.4 16.6 62.9	5,493,000 1,144,000 257,000 1,131,000 2,790,000	23.3 (100.0) 27.0 (14.1) 24.4 (6.7) 23.8 (16.9) 22.2 (60.0)	4.3 (100.0) 7.8 (20.8) 3.2 (4.7) 5.4 (20.6) 3.4 (50.8)	8.1 (100.0) 17.6 (20.6) 5.9 (3.2) 6.5 (45.0) 8.0 (28.0)	5.6 (100.0) 9.8 (24.4) 4.4 (3.3) 5.9 (20.3) 4.4 (48.8)	5.0 (100.0) 8.0 (24.1) 3.6 (2.6) 5.3 (16.0) 4.3 (53.8)	3.8 (100.0) 6.0 (19.8) 2.9 (3.0) 4.4 (14.7) 3.2 (58.4)	2.7 (100.0) 3.9 (12.6) 2.9 (9.5) 3.6 (11.7) 2.4 (63.9)	2.1 (100.0) 3.7 (14.3) 2.2 (11.9) 2.9 (9.3) 1.8 (62.3)

authors) may not equal 100% due to rounding and because not all racial/ethnic groups are included. Data are from the U.S. Department of Labor, Bureau of Labor Statistics, using 2015 Note. nec = not elsewhere categorized. Because the Current Population Survey is subject to sampling and nonsampling error, caution should be used when interpreting and comparing unemployment rates. The U.S. Census Bureau provides documentation for approximating standard errors for Current Population Survey data, which can be accessed online (http:// www.census.gov/prod/2006pubs/tp-66.pdf). Employment data on American Indians and Alaska Natives are excluded due to small sample size. Column percentages (calculated by Current Population Survey (unpublished).

Includes all Black non-Hispanic population ages 25-64. bIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25-64. Does not include other race, nec, two major races, three or more major races. Includes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-64. Does not include two major races; three or more races. ^dIncludes all White non-Hispanic population ages 25-64.

Table 4 2014 Racial/Ethnic Distribution of Select Occupation/Industry Clusters, Ages 25-34

	Population total	Population distribution (%)	Pre-K-12 teachers (%)	Registered nurses (%)	Financial specialists (%)	STEM (%)	Health care services (%)	Managerial and professional office (%)
U.S. population	43,279,253	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African American ^a	5,665,337	13.1	9.3	10.2	9.8	6.1	14.9	8.8
American	285,226	0.7	0.4	0.2	0.5	0.2	0.5	0.4
Indian/Alaska								
Native ^b								
Asian ^c	2,875,013	6.6	3.0	9.0	9.8	20.9	8.2	8.0
Hispanic ^d	8,448,047	19.5	9.7	8.7	12.0	8.1	12.8	12.8
White ^e	24,638,335	56.9	75.8	69.9	65.7	61.8	61.1	67.6

Note. nec = not elsewhere categorized. STEM = science, technology, engineering, math. Data are from U.S. Census Bureau, 2014 American Community Survey. Racial/ethnic distributions do not equal 100% because not all race combinations are included. See Appendix A for detailed list of occupations that compose these clusters.

^aIncludes all Black non-Hispanic population ages 25–34. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–34. Does not include other race, nec, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–34. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population ages 25–34.

Table 5 2014 Racial/Ethnic Distribution of Select Occupation/Industry Clusters, Ages 25-64

	Population total	Population distribution (%)	Pre-K-12 teachers (%)	Registered nurses (%)	Financial specialists (%)	STEM (%)	Health care services (%)	Managerial and professional office (%)
U.S. population	167,593,630	100.0	100.0	100.0	100.0	100.0	100.0	100.0
African American ^a	20,625,035	12.3	9.1	11.1	9.2	6.6	15.0	7.9
American	1,085,821	0.6	0.4	0.4	0.4	0.3	0.5	0.4
Indian/Alaska								
Native ^b								
Asian ^c	9,915,284	5.9	2.7	9.3	8.7	16.8	8.4	6.4
Hispanic ^d	26,294,580	15.7	9.1	6.5	9.2	6.9	10.0	9.4
Whitee	105,869,394	63.2	77.3	71.2	70.7	67.3	64.3	74.3

Note. nec = not elsewhere categorized. STEM = science, technology, engineering, math. Data are from U.S. Census Bureau, 2014 American Community Survey. Racial/ethnic distributions do not equal 100% because not all race combinations are included. See Appendix A for detailed list of occupations that compose these clusters.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–64. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–64. Does not include other race, nec, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–64. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population ages 25–64.

(c) financial specialists; (d) science, technology, engineering, and mathematics (STEM); (e) health care services; and (f) managerial and professional office (see Tables 4 and 5; Appendix A presents a profile of occupation and industry clusters). These six occupations and industry clusters represent roughly one third of all jobs in the workforce (U.S. Census Bureau, 2014a).

The White and Asian American populations tend to be overrepresented in these high-demand fields that require post-secondary education. In these same fields, with the exception of health care services, the African American population is underrepresented. The American Indian/Alaska Native and Hispanic populations are underrepresented in each of the six fields.

Among 25- to 34-year-olds, the White population represents 57% of the population but 61-76% of the professionals in the selected high-demand fields (see also Table 4). The Asian American population represents nearly 7% of 25- to 34-year-olds but, with the exception of pre-K-12 teaching, represents a higher percentage of the individuals in high-demand occupations. The Asian American population makes up over 20% of the 25- to 34-year-old STEM occupations.

In the larger age range of 25- to 64-year-olds, the White population composes 63% of the U.S. population but makes up more than three quarters of the teaching workforce; over 70% of nursing, financial services, and managerial and occupational professions; and more than two thirds of the STEM occupations (see Table 5). The 25- to 64-year-olds follow a similar pattern: The White and Asian American population groups tend to be overrepresented in most high-demand fields, while the remaining groups are underrepresented.

The underrepresentation of African American, American Indian/Alaska Native, and Hispanic workers among high-demand occupations is an indication of the urgent need for actions to alter these patterns. It is also an indication of the need for a closer look at the national degree attainment goals, their relationship to these high-demand occupations, and how these particular population groups are faring in pursuit of college degrees. The occupational status data presented in this section of the report suggest that the goal set by the Obama administration, expressing a need for the nation to strengthen its overall education and workforce competitiveness, needs to be accompanied by a clarion call for the African American, American Indian/Alaska Native, and Hispanic populations to catch up in workforce competitiveness and for the nation to consider setting targets for representation of these underserved population groups in higher education, which should in turn lead to better representation in the workforce.

For these trailing population groups, unemployment alone is contributing not only to lower financial and economic security but also to negative long-term consequences, such as the loss of human and social capital, decreased health and well-being of children and families, decreased physical and mental health, and disattachment from the labor market (Nichols, Mitchell, & Linder, 2013). More than 80% of the unemployed workforce is in the two age groups that are the focus of the nation's degree attainment goals, and on top of their struggles for reemployment, they experience higher likelihoods of chronic stress, loss of self-worth, loss of savings, and being unable to pay their mortgages (Van Horn, Zukin, & Kopicki, 2014).

Given that underserved populations are more likely to experience these challenges, the college degree attainment goals may be of greater necessity for these groups than for the U.S. population as a whole. The next section of this report examines the challenges for the nation in pursuing national degree attainment goals. The three underserved population groups, African American, American Indian/Alaska Native, and Hispanic, have a great distance to travel to meet these goals. In addition to examining the overall current state of progress, the analyses presented in the next section of this report include estimates of the level of productivity required by each group to reach the degree attainment goals of both the federal government and Lumina Foundation.

The equity challenges that the nation faces inform the decision to explore later in the report the prospect of investing in strategies to accelerate the progress of underserved populations toward achieving the goals in the near term. A subsequent report (Nettles, 2017) will present an examination of the academic, financial, and social preparation dynamics that need to be addressed to ensure long-term and sustainable success in college for underserved segments of the nation's population. It is important to note that education and employment, though related, are not identical. Reducing or eliminating the gaps in education across major racial/ethnic groups would likely have a positive effect on employment, but gaps in employment might still persist, as education is not the sole determinant of employment.

Degree Attainment Status, Production, and Effort Required to Achieve National Goals

The focus of this section is on estimating the status and trajectories of the overall U.S. population and each of the five racial/ethnic population groups by gender toward achieving the 60% goals of the federal government and Lumina Foundation. The aims are to paint a picture of the prospects and the challenges of reaching the federal government's degree attainment goal by 2020 and Lumina Foundation's goal by 2025 and to estimate the time frames in which the goals will be achieved overall and by each population group. The three main foci are (a) the current status of the population relative to degree attainment goals, (b) projected progress toward achieving degree attainment goals in the years leading up to the target years of 2020 and 2025 and beyond, and (c) increased college and university degree production required to achieve degree attainment goals by 2020 or 2025.

Table 6 Categories and Data Elements of Projection Tables 7, 8

Category	Data elements
Category A: Current status of population relative	1. U.S. population age 25 – 34 or 25 – 64 in 2014
to degree attainment goals	2. Percentage of U.S. population age 25–34 and 25–64 with associate's or bachelor's degree in 2014
Category B: Projected progress toward achieving degree attainment goals by 2020	 3. Percentage increase required from 2015 associate's and bachelor's degrees to reach 60% attainment of projected 2020 and 2025 populations 4. Ratio of average increase degree production to average rate of population
	increase between 2014 and 2020 and between 2014 and 2025 5. Projected percentage of population with associate's and bachelor's degrees in 2020 and 2025
	6. Projected percentage of goal attained by 2020 and 2025 at current rate of increase
	7. Average current projected annual increase in degrees awarded through 2020 and 2025
Category C: Effort required to achieve degree attainment goals by 2020 and 2025 and beyond	8. Average annual rate of increase in degree attainment required for 60% attainment ($2014-2020$ and $2014-2025$)

Note. See Appendix E for detailed versions of these tables with expanded data elements.

The data sources include the U.S. Census Bureau's 2014 population projections in the two age bands of 25–34 and 25–64 and the 2014 ACS from the University of Minnesota's Integrated Public Use Microdata Series (IPUMS; Ruggles, Genadek, Goeken, Grover, & Sobek, 2015). The purpose is to assess the degree attainment progress for each age group (25–34 and 25–64) toward the goals³ and to estimate the distribution of degrees and high-quality certificates based on recent trends reported by the National Center of Education Statistics (NCES) in the *Digest of Education Statistics*. The method for projecting degree attainment using these three data sources is presented in detail in Appendix B. The methodology relies on the accuracy of the U.S. Census Bureau's population projections, which are the gold standard for population estimates. Although they provide the best data from which to forecast future degree attainment, like all projections, they are subject to error due to unforeseen and unpredictable factors, such as the economy and public policies that may alter the pace and direction of trends.

Degree attainment projections through 2020, 2025, and 2060 that are presented in this section of the report are based on the assumption that the average annual changes in future degree attainment will be roughly equal to the average annual changes in attainment rates observed during the 2006-2014 time period. Detailed tables showing future yearly progress and the year that 60% attainment is reached for each race/ethnicity are presented in Appendix C. Projections for a second and longer time horizon are presented in Appendix D based on a quarter of a century (1990–2014) of steady growth in degree attainment.

The analyses of progress toward achieving the federal government's goals are based on the percentages of 25- to 34-year-olds and 25- to 64-year-olds who have attained an associate's degree or bachelor's degree. Given that, in addition to associate's degrees and bachelor's degrees, Lumina Foundation's (2025) goal includes people whose highest educational attainment is a high-quality certificate, additional analyses are presented of progress toward the foundation's goal featuring the combination of selected (high-quality) certificates as well as associate's, bachelor's, and higher degree attainment. The analyses include the eight data elements distributed among the three categories, depicting the status, projections, and level of increased production required to reach 2020 and 2025 goals, respectively (see Table 6).

Pursuing the Federal Government's College Degree Attainment Goal

In 2014, roughly 43 million U.S. adults were between the ages of 25 and 34, and approximately 42% had earned at least an associate's or bachelor's degree (see Table 7, Columns 1 and 2). That is, of course, far short of the federal government's national 2020 goal of 60%. From 2014, the nation needed nearly 54% (Column 3) more associate's and bachelor's degrees combined than it has presently among 25- to 34-year-olds to reach the goal. In addition to the overall population's goal attainment, among the key questions that need to be addressed are the following: (a) Will each racial/ethnic group achieve

the goal? (b) If so, when? (c) How much progress does each group need to make to achieve the goal? and (d) How does each group's trajectory compare with what is needed to progress to the goal?

One sign of progress is that ever since the goals were set in 2009, and even in prior years leading up to 2009, the rates of degree attainment have been climbing steadily. Annual degree attainment rates have been growing as fast as or faster than population growth across all racial/ethnic and gender groups (see Table 7, Column 4). Therefore, assuming these trends continue, a key question is not whether the federal government's degree attainment goal will be achieved but rather when the U.S. population overall and each group will achieve the 60% target. Based on the overall population ratio of 2.2:1 (Column 4) in projected annual increases in degrees awarded to annual projected increases in population, the proportion of the population earning an associate's or bachelor's degree is forecasted to grow from 42% in 2014 to approximately 46% in the target year 2020, which is still 14% shy of the year 2020 goal (Column 5).

The ratio of degree attainment to population growth (Column 4) is especially high for the White population group, at 3.8:1 for White men and 5.9:1 for White women. The ratios of degree attainment growth to population growth for the remaining major population groups are the following: 1.3:1 and 2:1 for African American men and women, respectively; 2.1:1 and 2.2:1 for Hispanic men and women, respectively; 1:1 and 1.1:1 for Asian American men and women, respectively; and 1.2:1 for both American Indian/Alaska Native men and women.

Referring to Table 7, Column 2, the Asian American population group has already achieved the goal. Just over 68% of the roughly 2.8 million, 25- to 34-year-old Asian American population in the United States has earned an associate's or bachelor's degree. The ratio of Asian American growth in earning degrees to growth in population for this age band is 1:1 (Column 4), which suggests that this group may be approaching a degree attainment growth ceiling, but the Asian American population is projected to grow and remain far beyond the 60% goal in the foreseeable future. Whereas 69% of 25- to 34-year-olds in the Asian American population group are projected to have an associate's or bachelor's degree, much smaller percentages of White (54%), African American (31%), Hispanic (26%), and American Indian/Alaska Native (22%) populations are projected to have an associate's or bachelor's degree by that same time. The 25- to 34-year-old Asian American population group is projected to achieve 114% of the goal⁵ by 2020; White, 90%; African American, 52%; Hispanic, 43%; and American Indian/Alaska Native, 37%. Like the Asian American population, White women are also projected to achieve the goal by 2020 (101%; Column 6).

Women of each racial group are outpacing their male counterparts in annual progress toward the goal. Hispanic women are increasing at a pace of 0.70% compared to 0.54% for Hispanic men (Table 7, Column 7), whereas the rates are 0.58% for African American women and 0.21% for African American men; 0.13% for Asian American women and -0.02% for Asian American men; 0.90% for White women and 0.64% for White men; and 0.23% for American Indian/Alaska Native women and 0.16% for American Indian/Alaska Native men. With the exception of the annual projected increases in rates of progress of Asian American men and women, both of whom have surpassed the 60% goal, and White women, who are on target to reach it by 2020, each of the other population groups' current average annual increase in degree attainment rate is far less than the rate needed to reach the 60% goal by 2020 (Table 7, Columns 7 and 8). Whereas the White population overall needs to double its annual rate of increase in degree production to reach the goal by 2020, the African American population overall needs to increase 13-fold from the present 0.41–5.2% annually, the Hispanic population overall needs to increase 10-fold from 0.64% annually to 6.3% annually, and the American Indian/Alaska Native population overall needs to increase 34-fold from 0.19% annually to 6.5% annually (Columns 7 and 8). White men need to quadruple the average annual rate of increase in degree production from the present 0.64–2.6% in order to achieve the federal government goal by 2020.

Without extraordinary intervention, the goals are just plainly and simply beyond the realm of possibility for African American, American Indian/Alaska Native, and Hispanic men and women (see Figures 1–5). Given that the 2020 goal is far outside of the grasp of underserved population groups, when will they reach the 60% mark? At the present pace of adult population growth and growth in degree attainment of 25- to 34-year-olds, 2041 is the projected year by which the nation can be expected to reach the federal government's 60% degree attainment target.

Whereas the Asian American population has already exceeded the 60% degree attainment goal, projections show that overall U.S. population and White population will meet the target before 2060 (see Figure 2). African American women are also expected to meet the goal (see Figure 3), whereas African American men and the overall African American population are not. American Indian/Alaska Native populations and the Hispanic population are not projected to reach 60% college degree attainment by 2060 (see Figures 4 and 5).

Table 7 Estimated Number of Associate's and Bachelor's Degrees Needed to Reach the 60% Attainment Goal by 2020, Ages 25-34

	Category A: population a	Category A: Current status population and degree attainment		Category B: Projected population and progress toward achieving national degree attainment goals by 2020	cted populatic al degree attain	n and progress t ment goals by 20	oward)20	Category C: Effort required to achieve the goal
Group	U.S. population in 2014	Degree attainment rate in 2014 (%)	Percentage increase in degree totals required to reach 60% by 2020	Ratio of annual change in degree totals to annual change in population: 2014–2020	Projected degree attainment in 2020 (%)	Projected percentage of goal attained by 2020	Projected average annual change in rate of degree attainment: 2014–2020 (%)	Average annual change in rate of degree attainment required from 2014 to 2020 to reach 60% attainment (%)
U.S. population	43,279,253	42.3	53.7	2.2:1	46.2	76.9	0.65	3.0
African American ^a	5,665,337	29.0	141.8	1.6:1	31.4	52.4	0.41	5.2
Men	2,705,664	23.4	212.8	1.3:1	24.7	41.1	0.21	6.1
Women	2,959,673	34.1	97.3	2.0:1	37.6	62.7	0.58	4.3
American	285,226	21.0	281.2	1.2:1	22.1	36.8	0.19	6.5
Indian/Alaska								
Native ^b								
Men	141,407	17.5	368.3	1.2:1	18.5	30.8	0.16	7.1
Women	143,735	24.4	219.6	1.2:1	25.7	42.9	0.23	5.9
Asian ^c	2,875,013	68.4	р	1.0:1	8.89	114.7	90.0	p
Men	1,364,706	66.2	р	1.0:1	66.1	110.2	-0.02	p
Women	1,510,307	70.4	р	1.1:1	71.2	118.7	0.13	p
Hispanic ^e	8,448,047	21.9	222.2	2.2:1	25.7	42.9	0.64	6.3
Men	4,423,827	18.2	295.0	2.1:1	21.4	35.7	0.54	7.0
Women	4,024,220	26.0	166.4	2.2:1	30.2	50.3	0.70	5.7
White ^f	24,638,335	49.6	24.2	4.6:1	54.2	90.3	0.76	1.7
Men	12,466,227	44.2	40.0	3.8:1	48.1	80.1	0.64	2.6
Women	12,172,108	55.1	11.2	5.9:1	60.5	100.8	0.90	0.8

Note. nec = not elsewhere categorized. The data for races exclude Hispanic and race combination is not included. See Appendix B for full methodology. Data are from U.S. Census Bureau; 2020 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Includes all Black non-Hispanic population ages 25–34. bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25-34. Does not include other race, nec, two major races, three or more major races. ^dGroup has or will have met 60% by 2020; calculation not applicable. *Includes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-34. Does not include two major races; three or more races. fincludes all White non-Hispanic population ages 25-34.

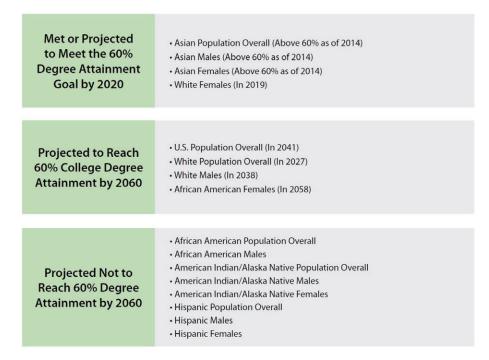


Figure 1 Summary of projected degree attainment of 25- to 34-year-olds. See Table C1 for detailed trajectory.

The Asian American and White populations overall are expected to be the only racial groups to reach the 60% goal among 25- to 34-year-olds near the target year of 2020: White women by 2019, the White population overall by 2027, and White men by 2038. Like each of the other racial/ethnic/gender groups, White men and women are progressing at different paces. When 25- to 34-year-old White women arrive at the 2020 goal in 2019, only 47% of White men are projected to have attained either an associate's or bachelor's degree or higher by that time, still short of the national goal, and 19 years before they are projected to arrive at the goal in 2038.

African Americans, American Indians/Alaska Natives, and Hispanic men and women are far behind Asian American and White men and women relative to the national degree attainment goal for 25- to 34-year-olds. Unless there is a dramatic increase in degree attainment rates that far exceed the pace of the 2006–2014 annual average rates of increase, then the African American, American Indian/Alaska Native, and Hispanic populations are not expected to reach the 60% degree attainment goal by 2020 and, furthermore, not even within the 2060 time frame for which the U.S. Census Bureau currently forecasts the U.S. population. At the current rate of progress, apart from Asian American and White men and women, the only other gender racial/ethnic group projected to reach the goal before 2060 is African American women, who, at their current rate of increase in degree attainment, would reach 60% by the year 2058.

So, in the context of the federal government's national degree attainment goal, on one hand, the trends are promising, because with the exception of Asian American men, each group's attainment increases are expected to exceed its population growth rates. Asian American men have already surpassed the goal far enough that their ratio of degree attainment to population growth rate does not place them in jeopardy of falling below 60%. On the other hand, however, with the exception of the Asian American population and White women, the progress is too slow and too small for each of the other racial/ethnic/gender groups to make substantial progress toward national degree attainment goals for 25- to 34-year-olds by the year 2020. At these rates of increased degree attainment, African American women and men are projected to join Hispanic women and men, American Indian/Alaska Native women and men, and White men in falling short of the national degree attainment goal of 60% by 2020. With the exception of African American women, these groups are not expected to reach the target even by 2060.

Pursuing Lumina Foundation's College Degree Attainment Goal

Lumina Foundation has set a goal that is different from the federal government's goal, and because it covers a broader and larger adult population, it might be considered more ambitious. Rather than focusing on the 43 million 25- to 34-year-olds,

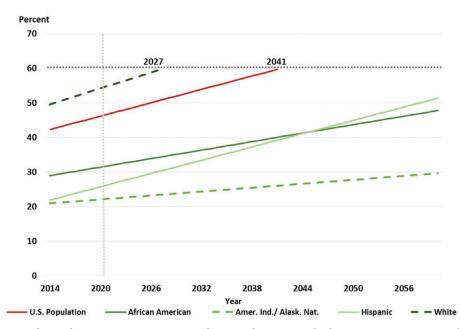


Figure 2 Progress toward 60% degree attainment: U.S. population and major racial/ethnic groups ages 25–34. The Asian American population is not included as they have already exceeded 60% attainment.

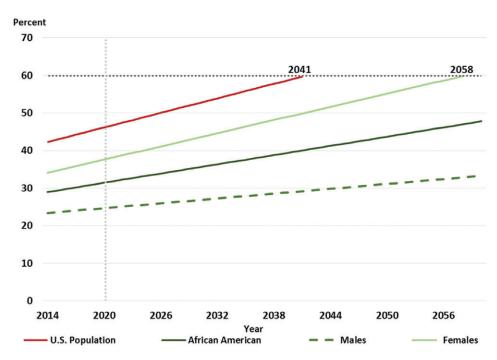


Figure 3 Progress toward 60% degree attainment: African American population ages 25-34.

Lumina Foundation's focus is on the 60% postsecondary attainment of the more than 167 million people who fall in the age span of 25–64 (Table 8, Column 1). The goal is for 60% of 25- to 64-year-old individuals to earn an associate's or bachelor's degree, high-quality certificate, or other high-quality postsecondary credential by the year 2025—just 5 years beyond the federal government's national degree attainment goal. Lumina Foundation (2016) measures high-quality certificate holders by including only people who are employed in the field of their certificate. Although researchers working on behalf of Lumina Foundation have found that 4.9% of working-age adults hold a high-quality certificate or other high-quality credential (Lumina Foundation, 2016), data that distinguish certificates by whether they are high-quality credentials are

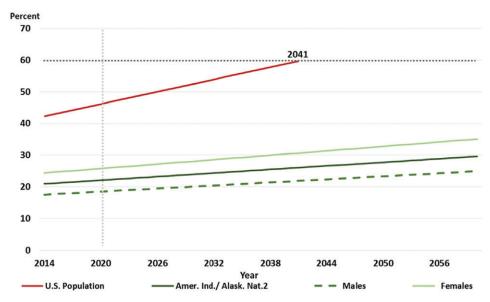


Figure 4 Progress toward 60% degree attainment: American Indian/Alaska native population ages 25 - 34.

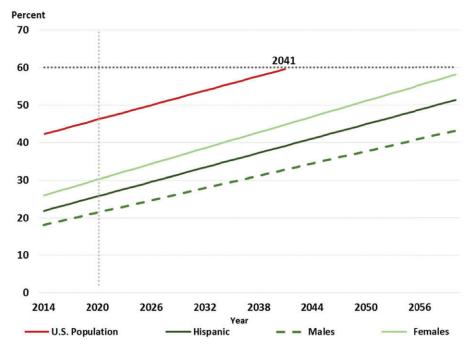


Figure 5 Progress toward 60% degree attainment: Hispanic population ages 25-34.

not as available, and especially in a way that is comparable in quality to NCES data on associate's and bachelor's degrees. The challenges associated with estimating the number of certificates and distinguishing their quality include (a) finding an official or even consensus definition that permits distinguishing high-quality certificates from all certificates, (b) locating trend data to use as a baseline for forecasting change and growth, and (c) locating data on the demographic profiles of certificate recipients, such as race/ethnicity and gender. Therefore, in addition to examining and estimating the supply of high-quality certificates and their contribution toward achieving Lumina Foundation's goal, Lumina Foundation's goal is examined initially in the same way as the federal government's goal — as if bachelor's and associate's degrees are the target credentials.

Table 8 Estimated Number of Associate's and Bachelor's Degrees Needed to Reach the 60% Attainment Goal by 2025, Ages 25-64

))		
	Category (A): Current status populat and degree attainment	Category (A): Current status population and degree attainment	Category (B): Projected pop goals by 2025	ry (B): ed population and p 7 2025	Category (B): Projected population and progress toward achieving national degree attainment goals by 2025	ving national degre	e attainment	Category (C): Effort required to achieve the degree attainment goals
	1	2	3	4	5	9	7	&
Group	U.S. population in 2014	Degree attainment rate in 2014 %	Percent increase in degree totals required to reach 60% by 2025 %	Ratio of annual change in degree totals to annual change in population: 2014 to 2025 %	Projected degree attainment in 2025 %	Projected percent of goal attained by 2025 %	Projected average annual change in rate of degree attainment: 2014 to 2025 %	Average annual change in rate of degree attainment required from 2014 to 2025 reach 60% attainment %
U.S. population	167,593,630	40.4	55.6	2.7:1	43.6	72.7	0.29	1.8
African American ^a	20,625,035	29.3	125.0	1.7:1	31.1	51.8	0.16	2.8
Males	9,677,566	24.7	173.3	1.2:1	25.2	42.0	0.04	3.2
Females	10,947,469	33.4	93.4	2.3:1	36.3	9.09	0.27	2.4
Amer. Ind./Alask. Nat. ^b	1,085,821	23.6	200.6	0.9:1	23.2	38.6	-0.04	3.3
Males	526,029	20.2	258.9	0.7:1	19.0	31.7	-0.11	3.6
Females	559,792	26.8	159.3	1.1:1	27.2	45.4	0.03	3.0
Asian ^c	9,915,284	8.09	P	1.4:1	65.7	109.4	0.44	ъ
Males	4,614,565	61.2	Р	1.2:1	64.5	107.5	0.30	ъ
Females	5,300,719	60.4	Р	1.5:1	9.99	111.0	0.56	ъ
Hispanic ^e	26,294,580	21.1	280.4	1.5:1	23.9	39.8	0.25	3.5
Males	13,360,946	18.5	344.7	1.4:1	20.3	33.8	0.16	3.8
Females	12,933,634	23.8	229.0	1.7:1	27.5	45.9	0.34	3.3
$White^{f}$	105,869,394	45.7	23.6	-0.6:1	50.1	83.6	0.40	1.3
Males	52,737,247	42.7	33.1	-0.2:1	45.5	75.8	0.25	1.6
Females	53,132,147	48.6	15.4	-0.8:1	54.8	91.4	0.56	1.0

Note. nec = not elsewhere categorized. The data for races exclude Hispanic and race combination is not included. See Appendix B for full methodology. Data are from U.S. Census Bureau; 2020 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/

^a Includes all white non-Hispanic population Ages 25 - 64. ^b Includes all black non-Hispanic population Ages 25 - 64. ^c Includes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec, population Ages 25-64. Does not include two major races; three or more races. ^dGroup has or will have met 60% by 2020, calculation not applicable. ^eIncludes Chinese, Japanese, other Asian or Pacific Islander, population Ages 25–64. Does not include other race, nec, two major races, three or more major races. fincludes all American Indians and Alaska Natives non-Hispanic population Ages 25-64. Roughly 40% of the overall population of 25- to 64-year-olds have earned an associate's or bachelor's degree or higher as their highest educational credential (Table 8, Column 2). With fewer than 10 years remaining before Lumina Foundation's target year 2025, and assuming present trends and conditions persist, the nation will need a net degree attainment increase of 56% more total degrees to achieve the 60% goal (Column 3). Instead of the current projected 0.29% annual average increase in the rate of degree attainment (Column 7), each year over the 11 years from 2014 to 2025 (the average annual rate of increase observed from 2006 to 2014), an increase of 1.8% annual growth is needed to reach the goal of 60% (Column 8).

As with 25- to 34-year-olds, the Asian American population of 25- to 64-year-olds has already reached the 60% goal. But unlike the Asian American 25- to 34-year-old age population, which exceeded the goal in 2014, 25- to 64-year-olds are just barely achieving the goal (61%). By the year 2025, however, the Asian American population is projected to be at nearly 66% of 25- to 64-year-olds having earned an associate's or bachelor's degree, far exceeding each of the other population groups and Lumina Foundation's goals, even before taking into account the addition of high-quality certificates (Table 8, Column 5). With the exception of the Asian American population, each racial/ethnic group needs to make substantially more progress than it is presently making to achieve Lumina Foundation's goal, and as with the federal government's goal, African American, American Indian/Alaska Native, and Hispanic groups need to make such extraordinary progress that it seems impossible.

Among 25- to 64-year-olds, the White population group needs 24% more total degrees to reach Lumina Foundation's 60% goal (Table 8, Column 3). The African American population group needs a net increase of 125%; American Indian/Alaska Native, a 201% increase; and Hispanic, a 280% increase in associate's and bachelor's degrees or higher to reach the 60% goal.

On the basis of the present ratio of annual degree attainment growth to population growth, with the exception of the White population overall, White women and men, the American Indian/Alaska Native population overall, and American Indian/Alaska Native men, each racial and gender group's degree attainment growth rate exceeds its annual population growth rate (Table 8, Column 4). The pace of degree attainment growth rates, however, is still far less than what each group needs to reach the goal. To reach the 2025 college degree attainment goal, the African American population group needs to go from the current average annual increase in rate of degree attainment of 0.16–2.8%; American Indian/Alaska Native, from -0.04% to 3.3%; and Hispanic, from 0.25% to 3.5% (Columns 7 and 8).

At present rates, the White population overall is projected to reach the 60% goal by 2042. White women are projected to reach the goal by approximately 2034, and White men, 20 years later, by 2054. Neither the African American Indian/Alaska Native, nor Hispanic populations are expected to meet 60% attainment overall or by gender group by 2060 (see Figures 6–10).

The Addition of High-Quality Certificates

Adding high-quality certificates to associate's and bachelor's degrees accelerates the pace and prospects of reaching degree attainment goals. On the basis of U.S. population groups for which data are available, NORC at the University of Chicago and Lumina Foundation (2016) have estimated that 4.9% of the 25- to 64-year-old population has high-quality certificates (unpublished data). The data are not available for two of the five population groups, American Indians/Alaska Native and Asian American, but they are available for the White, African American, and Hispanic populations.

Referring to Table 9, Column 3, adding high-quality certificates has the effect of boosting the degree attainment rate overall by 4.9% and a range of 3.9% for White women to 6.8% for African American men. Adding high-quality certificates increases the population with credentials and degrees by 5.3% for White men, by 6.2% and 5.9%, respectively, for Hispanic men and women, and by 4.3% for African American women.

Referring to Column 7 in Table 9, by 2025, White men are projected to achieve 85% of the goal; African American women, 68%; African American men, 53%; Hispanic women, 56%; and Hispanic men, 44%.

White women, whose present annual degree/certificate growth rate is 0.56% per year, is the only racial/gender group that requires less than 1% increase per year to achieve Lumina Foundation's goal for 2025 (Table 9, Columns 8 and 9). White men have a current average annual rate of growth of 0.25% but need an annual growth rate of 1.1% to reach the goal by 2025; African American women have an annual average growth rate of 0.27% but need a rate of 2.0% in order to reach the goal; African American men have an annual average growth rate of 0.04% but need a growth rate of 2.6% per



Figure 6 Projected degree attainment of 25- to 64-year-olds. See Table C2 for detailed trajectory.

year. Hispanic women and men have average annual growth rates of 0.34 and 0.16%, respectively, in certificates/degrees, and yet to reach the 2025 goal on time, they need average annual growth rates of 2.8% and 3.2%, respectively.

Even though adding high-quality certificates to associate's and bachelor's degrees contributes to accelerating the pace toward Lumina Foundation's goal, the current rate of annual increase in degree and certificate production relative to population growth for people 25–64 years old will not lead to achieving the goal by the target year 2025. In 2025, 49% of 25- to 64-year-olds are expected to have earned an associate's or bachelor's degree or a high-quality certificate (Table 8, Column 6). Not until 2048 will an estimated 60% of the adult population of 25- to 64-year-olds have attained a high-quality certificate, associate's degree, or bachelor's degree. The White population overall is expected to reach the goal just under a decade sooner, by 2034; White women by 2027, instead of 2034; and White men by 2046. By adding certificates, the adult population of 25- to 64-year-old African American women is projected to get close to the goal but will not reach it by 2060. Even by including high-quality certificates on top of associate's and bachelor's degrees, Hispanic men and women are still not projected to reach the goal by 2060. As a population group, Asian Americans have already achieved the 60% goal. So although it would be interesting to know the effect of adding certificates for the Asian American population, the absence of data for the Asian American population, as well as the American Indian/Alaska Native population group, prevents us from gauging the group's current status and from estimating the schedules of progress toward goal attainment (see Table C3).

Shift-Share Analysis

The combination of each racial/ethnic group progressing at a different pace toward the goals and the changing demographic composition of the nation could have an effect on overall goal attainment. A shift-share⁶ analysis at the racial/ethnic group level reveals the effect of changing demographics on the nation's progress toward the degree attainment goals for the two age groups. Gender is excluded, and the focus is on each racial/ethnic group as a whole. The shift-share analyses provide a view of future degree attainment if population shares among racial/ethnic groups were to stay constant but rates of growth in both population and degree attainment across the racial/ethnic groups were to continue growing as expected.

The U.S. Census Bureau projects that the growth of the 25- to 34-year-old White population is slowing and that the White population will ultimately begin shrinking both in total number and by share of the overall U.S. population. For

Category C:

Table 9 Estimated Number of Certificates and Associate's and Bachelor's Degrees Needed to Reach the 60% Attainment Goal by 2025, Ages 25-64

Effort required to achieve the degree attainment goals	Average annual change in rate of degree	attainment required from 2014	to 2025 reach 60%	attainment (%)	1.3	2.6	2.0	3.0	3.2	2.8	6.0	1.1	0.7	
	Projected average	annual change in rate of	degree attainment:	2014–2025 (%)	0.29	0.04	0.27	0.25	0.16	0.34	0.40	0.25	0.56	0.00
ation and ational 2025		Projected	percentage of goal	attained by 2025	80.9	53.3	67.7	49.9	44.1	55.7	91.2	84.7	6.76	
Category B: Projected population and progress toward achieving national degree attainment goals by 2025		Projected combined certificate	and degree attainment	in 2025 (%)	48.5	32.0	40.6	29.9	26.5	33.4	54.7	50.8	58.7	0.31
Category B progress to degree attai	Ratio of annual	change in degree totals to	annual change in	population: 2014–2025	2.5:1	1.1:1	2.1:1	1.4:1	1.3:1	1.5:1	-0.4:1	0.0:1	-0.7:1	50.4
		Percentage increase in degree	totals required to	reach 60% by 2025	38.8 89.3	114.3	71.3	195.8	232.9	163.7	12.4	18.4	8.9	
s inment		High-quality	certificate attainment	in 2016 , % $(SE)^a$	4.9	6.8 (2.7)	4.3 (1.3)	6.0	6.2 (2.2)	5.9 (1.9)	4.6	5.3 (1.2)	3.9 (1.2)	
Category A: Current status population and degree attainment		High-quality certificate	and above attainment	rate in 2014 (%)	45.3 34.8	31.5	37.7	27.2	24.7	29.7	50.3	48.0	52.5	26.84
Category			U.S.	population in 2014	167,593,630 20,625,035	9,677,566	10,947,469	26,294,580	13,360,946	12,933,634	105,869,394	52,737,247	53,132,147	559,792
				Group	U.S. population African	American ^b Men	Women	$Hispanic^c$	Men	Women	White ^d	Men	Women	Women

Note. nec = not elsewhere categorized. Certificate attainment rates for Asians and American Indians are not available. African American and White data exclude Hispanic. See Appendix B for full methodology. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/ national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/; Lumina Foundation, Stronger Nation 2016; NORC, unpublished estimates from the National Education and Employment Study.

Therefore the certificate attainment rate is left as a constant between 2014 and 2025, and no growth is projected. bIncludes all Black non-Hispanic population ages 25-64. cIncludes *Certificate rates for U.S. population, Whites, Blacks, and Hispanics were obtained from Lumina Foundation's Stronger Nation 2016 report. The gender breakdowns for each race group were obtained from NORC by request and include standard errors. These estimates were produced using the data collected on behalf of Lumina Foundation through the National White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-64. Does not include two major races; three or more races. ^dIncludes all Education and Employment Study. Because reliable high-quality certificate attainment estimates exist for only a single time point, certificate attainment growth cannot be estimated. White non-Hispanic population ages 25-64.

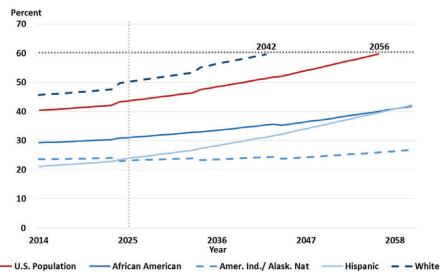


Figure 7 Progress toward 60% degree attainment: U.S. population and major racial/ethnic groups ages 25–64. The Asian American population is not included as they have already exceeded 60% attainment.

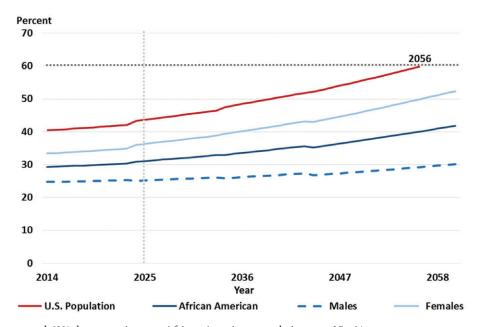


Figure 8 Progress toward 60% degree attainment: African American population ages 25-64.

the 25- to 64-year-old age span, the White population has already begun to decline and is expected to continue declining (U.S. Census Bureau, 2014b). Given that the White population holds a majority of the degrees in both age groups, a decline in degrees in the overall population would have an effect on the rate at which the nation is projected to advance toward 60% degree attainment. The shift-share analyses estimate the extent of that impact. In the case of the 25- to 34-year-old population, if the future population shares remained as observed in 2014, the nation would reach 60% degree attainment in 2039, 2 years sooner than the projected year of 2041 (see Table 10).

For the 25- to 64-year-old population, in which the White population represents a larger majority, the U.S. population would reach 60% degree attainment goal in 2051, 5 years earlier than the projected year of 2056, with changing demographics of the population (see Table 11).

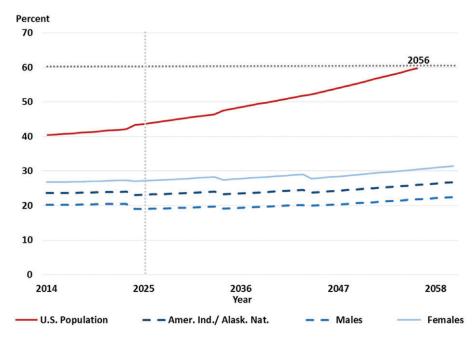


Figure 9 Progress toward 60% degree attainment: American Indian/Alaska Native population ages 25-64.

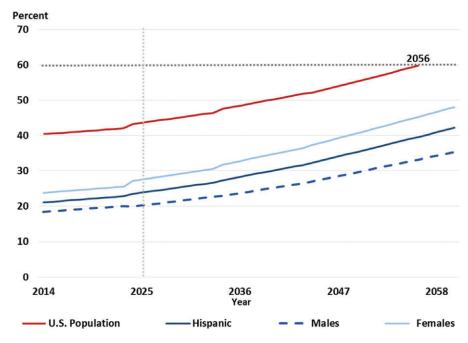


Figure 10 Progress toward 60% degree attainment: Hispanic population ages 25-64.

Toward Refining Degree Attainment Goals

Two different time horizons (1990–2014 and 2006–2014) were used as a basis for forecasting the trajectories, and the underserved population groups are not projected to reach either of the 60% goals within the next three decades under either scenario. Alternative methods are unlikely to paint a more positive outcome. Establishing national degree attainment goals without consideration of underserved populations is not good for the nation overall and could result in not sufficiently inspring these populations to strive to reach the goals nor close the gaps with their Asian American and White contemporaries.

Table 10 Shift-Share Analysis of Population Change in 25- to 34-Year-Old Age Group

Group	2014 population share (%)	2014 attainment rate (%)	Projected year of 60% attainment (original projection)	Year of 60% attainment with 2014 population share
U.S. population	100.0	42.3	2041	2039
African American ^a	13.1	29.0	_	_
American Indian/Alaska Native ^b	0.7	21.0	_	_
Asian ^c	6.6	68.4	_	_
Hispanic ^d	19.5	21.9	_	_
White ^e	56.9	49.6	_	_

Note. nec = not elsewhere categorized. Weighting is derived by multiplying the population share by the overall U.S. population attainment rate. The sum of the weighted degree attainment rates is equal to the overall U.S. population attainment rate. Degree attainment rates for groups outside of the five major racial/ethnic groups (e.g., multiracial groups, ethnic), while captured in the overall U.S. population rates, are not depicted in this table. For this analysis, the year 2041 was chosen for the Federal Goal and Lumina Goal because it is the year in which the overall U.S. population for the respective goals was projected to reach 60%. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

^aIncludes all Black non-Hispanic population. ^bIncludes all American Indians and Alaska Natives non-Hispanic population. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander. Does not include other race, nec, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population.

Table 11 Shift-Share Analysis of Population Change in 25- to 64-Year-Old Age Group (Lumina Foundation)

Group	2014 population share (%)	2014 attainment rate (%)	Projected year of 60% attainment per original projection	Year of 60% attainment with 2014 population share
U.S. population	100.0	40.4	2056	2051
African American ^a	12.3	29.3	_	_
American Indian/Alaska Nativeb	0.6	23.6	_	_
Asian ^c	5.9	60.8	_	_
Hispanic ^d	15.7	21.1	_	_
White ^e	63.2	45.7	_	_

Note. nec = not elsewhere categorized. Weighting is derived by multiplying the population share by the overall U.S. population attainment rate. The sum of the weighted degree attainment rates is equal to the overall U.S. population attainment rate. Degree attainment rates for groups outside of the five major racial/ethnic groups (e.g., multiracial groups, ethnic), while captured in the overall U.S. population rates, are not depicted in this table. For this analysis, the year 2056 was chosen for the Federal Goal and Lumina Goal because it is the year in which the overall U.S. population for the respective goals was projected to reach 60%. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

^aIncludes all Black non-Hispanic population. ^bIncludes all American Indians and Alaska Natives non-Hispanic population. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander. Does not include other race, nec, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population.

Given that the goals are, in the case of the federal government, an aggregation of undergraduate degrees, and for Lumina Foundation an aggregation of undergraduate degrees and high-quality certificates, the only way to discern the contribution of each type of degree or certificate toward achieving the goals is to examine data for each one. The short analyses of unemployment and occupational field of employment presented in the second section of this report point to the possible role that variation in the level of degree and major field may play in the labor market. Given the extent to which underserved population groups are trailing substantially not just in undergraduate degrees overall but also in the various levels and types of degrees, major field could be a meaningful area of focus by the federal government, Lumina Foundation, and other organizations that are interested in addressing attainment gaps.

If the national goals are not sufficient inspiration as they presently exist, what will be needed for the nation to make substantive progress among underserved population groups? Taking a closer look by disaggregating degree types and the pipeline leading to degree attainment may provide some insight that can be used to consider future generations of degree attainment goal setting. The next section of this report examines the influence of degree level, and then the subsequent section discusses the student pipeline leading to higher education degrees in search of the sources of the degree attainment dilemma of underserved population groups.

Disaggregating Goals and Assessing Progress by Type of Degree

The data presented in the previous section revealed large gaps among various major racial/ethnic and gender groups toward reaching the federal government and Lumina Foundation's degree attainment goals. Because the goals comprise an aggregation of associate's degrees, bachelor's degrees, and higher degrees and, in the case of Lumina Foundation, also high-quality certificates, the gaps presented in overall goal attainment mask differences in the types and levels of degrees among the groups, concealing challenges that underserved population groups face. In addition, aggregating all degrees and credential types makes it difficult to understand the contribution of each to goal attainment.

As can be seen in Tables F1 and F4, the majority of individuals across all racial/ethnic groups in the age ranges of 25–34 and 25–64 whose highest educational attainment is an associate's or bachelor's degree have earned a bachelor's degree or higher (79% bachelor's vs. 21% associate's for 25- to 34-year-olds and 78% bachelor's vs. 22% associate's among 25- to 64-year-olds). In recent years, bachelor's degrees have accounted for two thirds of the undergraduate degrees being awarded each year. Of the undergraduate degrees awarded in 2014, bachelor's degrees accounted for 66% and associate's degrees 34%⁷ (National Center for Education Statistics [NCES], 2015b, 2015c).

The gap between the White population and each of the three underrepresented population groups on the highest and most common of the undergraduate degrees, the bachelor's degree, is larger than it is for overall degree attainment (NCES, 2013a, Table 1.1). The gaps are even wider between the Asian American population and the three underrepresented population groups than the gaps between the White population and each other group. The analyses in this section of the report focus on the 25- to 34-year-old population, because the vast majority of degrees and certificates being awarded in the United States are earned prior to the age of 30. Over 86% of the overall population of bachelor's degree recipients earned their degrees before they were 30 years old. There are variations by race: The White and Hispanic population groups are within 2% and 3%; a very small fraction of the Asian American population (5%) earns bachelor's degrees at or after the age of 30 years old; and larger percentages of the White (12%), Hispanic (17%), and African American populations (29%) earn bachelor's degrees after reaching age 30.

Bachelor's Degrees

In 2014, roughly one third of the nation's 25- to 34-year-olds had earned a bachelor's degree or higher (see Figure 11). The overall rate of bachelor's degree or higher attainment, however, for the White population (40%) was nearly double the rate for the African American population (22%) and almost triple that of the Hispanic (15%) and American Indian/Alaska Native populations (13%).

Women exceeded men in each racial/ethnic group in earning a bachelor's degree or higher. Asian American women and men led all racial/ethnic and gender groups, with approximately 63% and 60%, respectively, having earned a bachelor's degree, compared to 44% of White women and 35% of White men; 24% of African American women and 17% of African American men; 18% of Hispanic women and 12% of Hispanic men; and 15% of American Indian/Alaska Native women and 11% of American Indian/Alaska Native men. Bachelor's degrees comprise a larger share of total degrees for the Asian American and White populations than for the African American, American Indian/Alaska Native, and Hispanic populations. If the federal government's and Lumina Foundation's degree attainment goals applied only to bachelor's degrees, Asian American men and women would still have already achieved the goals. African American, American Indian/Alaska Native, and Hispanic populations, however, would be even further away from achieving the goals than when associate's degrees and certificates are included.

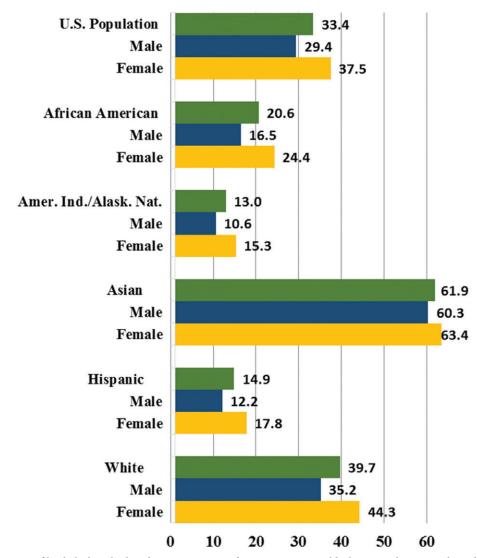


Figure 11 Percentage of bachelor's or higher degree attainment for 25- to 34-year-olds, by race/ethnicity and gender, 2014. Data are from the American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Associate's Degrees

The proportion of the adult population whose highest educational level is an associate's degree is smaller than the population who earned a bachelor's degree. Underserved populations are overrepresented in this group, while Asian American and White populations are underrepresented. Overall, racial/ethnic group percentage differences among adults with associate's degrees appear to be smaller than the differences seen for bachelor's degrees.

In 2014, roughly 9% of the U.S. adult 25- to 34-year-old population had earned an associate's degree (see Figure 12). Between 6% and 9% of men and between 9% and 11% of women from each racial/ethnic and gender group had obtained an associate's degree. Associate's degrees accounted for a larger share of the postsecondary degrees of African American (29%), Hispanic (32%), and American Indian/Alaska Native (38%) population groups than for the White (20%) and Asian American population groups (10%; see Table F1). The share of associate's degrees is projected to stay fairly stable over the next several years leading up to 2020 and 2025 (see Appendix F for a full comparison of associate's and bachelor's degree attainment).

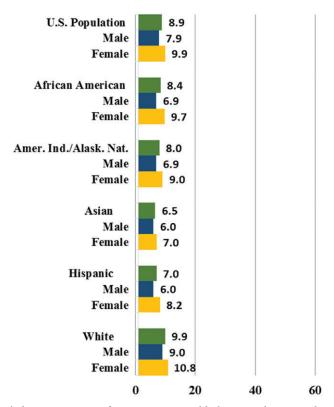


Figure 12 Percentage of associate's degree attainment for 25- to 34-year-olds, by race/ethnicity and gender, 2014. Data are from American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Some College, No Degree

People who have attended college but have either dropped out or stopped out⁸ compose a large share of the adult population. The number of individuals who have some college experience but earned no degree is approximately 2.5 times the size of the population with an associate's degree. Those individuals with some college and no degree are among the pool of prospects for colleges and universities to recruit in order to help reach degree attainment goals. In 2014, 23% of 25- to 34-year-olds in the U.S. population reported their highest educational attainment as being some college but no degree (see Figure 13). Across racial/ethnic groups, the rates of people having some college but no degree ranged from 13% (Asian American women) to 31% (African American women). The 29% of the African American population reporting having some college but no degree represents approximately 1.66 million people. As with each of the population groups, these individuals represent a prospective pool to cultivate to ensure that progress is made toward the national goal.

Underserved population groups are better represented among people who have some college but no degree than they are among people with a bachelor's or associate's degree. These differences reflect the larger college dropout rates for underserved population groups compared to Asian American and White groups—a perennial challenge for colleges and universities. Recall that for the two types of degrees, associate's and bachelor's, women represent a larger share in each racial group than do men. For those individuals who have some college but no degree, women also represent a larger share than men for African American, American Indian/Alaska Native, and Hispanic groups. Men, however, comprise a larger share than women for Asian Americans, whereas White men and women are nearly equal (see Tables 13 and 14).

In 2014, African American women represented a larger share than African American men in each of the three categories of attainment (Figures 11–13), ranging from a difference between 3% and 4% for both an associate's degree or some college with no degree to 8% for a bachelor's degree. Approximately 24% of African American women had earned a bachelor's degree, compared to 17% of African American men; 10% of women and 7% of men had earned an associate's degree; and 31% of women and 28% of men had completed some college with no degree. Other racial/ethnic groups followed a similar pattern of gender differences as seen with African Americans, but with varying levels. For example, approximately 18%, 8%, and 23% of Hispanic women earned a bachelor's degree, an associate's degree, or completed some college with no

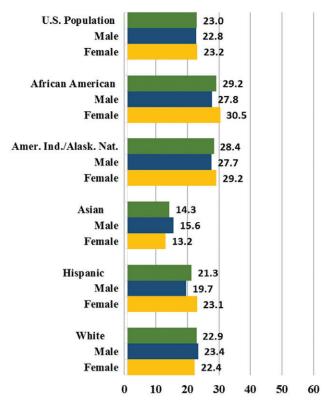


Figure 13 Percentage of some college, no degree attainment for 25- to 34-year-olds, by race/ethnicity and gender, 2014. Data are from American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

degree, compared to 12%, 6%, and 20% of Hispanic men, respectively, and 15%, 9%, and 29% of American Indian/Alaska Native and 11%, 7%, and 28% of American Indian/Alaska Native men, respectively.

The Asian American population is leading in modeling the degree attainment pursuits represented in the federal government's and Lumina Foundation's goals. It is the only population group that has achieved and surpassed national degree attainment goals; furthermore, it has the highest percentage of individuals who have received a bachelor's degree, the smallest gender differences, and the lowest rate of dropping/stopping out of college. Even if degree attainment goals were focused solely on obtaining a bachelor's degree, Asian Americans would have exceeded them.

High-Quality Certificates

Lumina Foundation estimates that 4.9% of the population of 25- to 64-year-olds have attained a high-quality certificate as their highest education credential, with a range of 6.8% for African American men to 3.9% for White women. A larger proportion of men of each racial group have attained certificates as their highest credential than women (see Figure 14).

Implications

The data presented in the fourth section of this report corroborates evidence presented earlier in the third section that revealed the large racial/ethnic group differences in overall college degree attainment. The data in this section provide a view of the contribution that different types of degrees and certificates make toward overall goal attainment as well as the differences among population groups. By disaggregating the degree attainment data by degree type and certificates, a clearer picture emerges regarding the challenges that underserved population groups must confront in order to achieve equality in their pursuit of the nation's degree attainment goals.

Setting and then focusing on achieving goals for the overall population and aggregating undergraduate degrees and credentials camouflages the greater and distinctive challenges faced in degree attainment by different racial groups. Both the challenges and the rewards are greater for underserved populations achieving a bachelor's degree. Given that degree

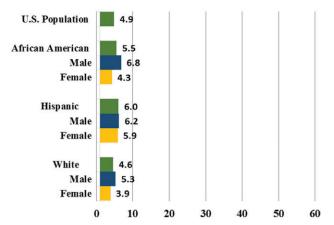


Figure 14 Percentage of high-quality certificate attainment for 25- to 64-year-olds, by race/ethnicity and gender, 2016. Data are from Lumina Foundation: Stronger Nation 2016, NORC at the University of Chicago, unpublished estimates from the National Education and Employment Study.

attainment levels have been shown to be correlated with status levels of employment and careers (Carnevale, Rose, & Ban, 2011), the implication is that unless the bachelor's degree gap is closed among underserved groups, not only will underrepresentation of these populations persist and grow wider at successive levels of education but also will their representation in selected high-status occupational clusters and careers (U.S. Bureau of Labor Statistics, 2016). Carnevale et al. (2016) reported that 87% of the 9.9 million new jobs in the 6 years since 2010 have been filled by people with bachelor's degrees. Because the rationale behind the federal government's and Lumina Foundation's goals includes postsecondary education's fulfillment of workforce demands, the data give rise to questions concerning how population groups, especially underserved groups, navigate the pathways leading to various degree levels. The next section examines the pipeline leading up to degree attainment.

The Condition of the Postsecondary Pipeline Leading to Degree Attainment

Although degrees attained by the adult population 25 years of age and older is the focus of national higher education goals, the prospects of achieving the goals are enhanced by giving attention to indicators of the success of people in a broader scope of the education pipeline leading up to college degree attainment. Such indicators as the number of students who enter, persist, and progress through undergraduate degree programs are useful to focus on. Specifically, four key indications of the strength of the student pipeline are the following: (a) students' degree expectations, (b) students' enrollment/matriculation, (c) students' persistence/degree completion, and (d) students' timeliness to degree completion.

Consistent with the racial/ethnic and gender differences in degree attainment patterns observed in the previous two sections, analyses in this part of the report reveal additional racial/ethnic gaps on multiple indicators in the student pipeline, including the following five that are examined in this section of the report: (a) precollege expectations of earning a college degree, (b) enrolling in college immediately after high school, (c) overall enrollment in college, (d) degrees earned/awarded each year, and (e) degrees completed on time or nearly on time. This section examines each of these five indicators, revealing the gaps that need to be closed among the U.S. population groups in pursuit of national degree attainment goals.

Raising Expectations

The extent to which student behavior in actively pursuing postsecondary education corresponds to their expectations may be one indication of the long-term prospect of achieving the goal. Overall, roughly 62% of the nation's 3 million high school ninth graders indicate that they expect to earn an associate's or bachelor's degree or higher (see Figure 15). As with other indicators, there are rather stark racial/ethnic and gender differences in the expectations. Across all racial/ethnic groups, a larger percentage of women than men expect to attain a degree. The bachelor's or higher degree is the overwhelming preference of each racial/ethnic group. For combined associate's and bachelor's degrees, White (69%), Asian American (68%),

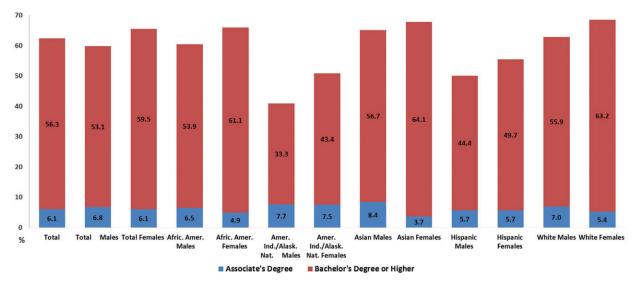


Figure 15 Educational expectations of 2009 ninth graders by gender and race. Adapted from "High School Longitudinal Study of 2009 (HSLS:09)" (NCES, 2009); tabulations by the authors.

and African American (66%) women lead in degree expectations; smaller percentages of Hispanic (56%) and American Indian/Alaska Native (51%) women express expectations of attaining college degrees. A larger percentage of Asian American (65%) men express expectations of attaining a college degree, compared to White (63%), African American (61%), Hispanic (55%), and American Indian/Alaska Native (41%) men. Recommendations aimed toward increasing degree attainment might include strategies for raising the expectations of high school students of achieving a college degree. Presently, the rates of expected degree attainment in both gender groups within the American Indian/Alaska Native and Hispanic populations are below 60%.

Increasing the College Enrollment of Recent High School Graduates

Roughly 64% of all undergraduate students are in the age range 18–24 (NCES, 2014a). They compose 78% of full-time undergraduate students and 40% of part-time undergraduates. Substantial dividends are likely to be realized toward achieving the nation's college degree attainment goals by cultivating, attracting, retaining, and graduating more of these conventionally aged, recent high school graduates, the majority of whom indicate that they expect to achieve a college degree (see Figure 15).

The NCES (2016) reported that 66% of the roughly 3 million high school graduates each year are entering 2- or 4-year colleges within a year of graduating from high school. This varies by race, with 80% of the Asian American population group, 69% of the White population group, 58% of the African American population group, and 60% of the Hispanic population group entering postsecondary educational institutions within a year after graduating from high school (the American Indian/Alaska Native population group is not reported).

As a collection, U.S. colleges and universities represent a broad spectrum of admission standards, including highly selective, moderately selective, and open admissions, and many offer remedial/developmental curricula and courses to accommodate the vast array of students who are not academically prepared (Shannon & Smith, 2006). Because of the large number and broad range in admissions requirements, even academic preparation, as important as it may be for student success in college, is not an impediment to college admissions. High school grades and test scores may limit the type of postsecondary institutions as options available to students but do not prevent them from being admitted and attending an institution (MacAllum, Glover, Queen, & Riggs, 2007). Among the key elements for increasing college enrollment and degree completion are improving precollegiate academic, financial, and social preparation along with admissions test scores of underrepresented population groups. Policies and practices aimed at improving the present conditions for underrepresented and underserved students along these dimensions are likely to yield greater college and career readiness outcomes and in turn lead to greater degree attainment.

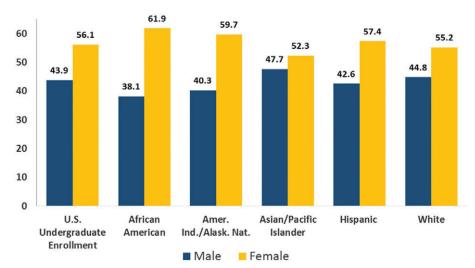


Figure 16 Proportion of men to women enrolled in an undergraduate program, 2014. From the National Center of Educational Statistics, *Digest of Education Statistics* (2015), Table 306.10, https://nces.ed.gov/programs/digest/d14/tables/dt14_326.20.asp

Undergraduate Enrollment

The substantial underrepresentation among bachelor's degree holders that African American, American Indian/Alaska Native, and Hispanic populations make up is made more problematic by their underrepresentation in the undergraduate student pipelines. The problem is especially acute for men of each of these three groups. Similar to the trend in degrees attained, where women make up a larger share overall, women also make up a larger proportion of students enrolled in the nation's colleges and universities than men, both overall and within each racial/ethnic group. This gender gap is more pronounced in the African American population than among the other population groups.

African American men make up a smaller proportion of the African American population enrolled in college than men in each of the other major racial/ethnic groups (NCES, 2015a; see Figure 16). Of the nation's 17.3 million undergraduate students in 2014, 56% were women and 44% were men. Nearly one third of undergraduate enrollment is made up of underserved population groups. Roughly 14% of undergraduates in 2014 were African Americans and 17% were Hispanics. Among the African American undergraduates, 62% were women and 38% were men. Among Hispanic undergraduate students, 57% were women and 43% were men (NCES, 2015a). American Indians/Alaska Natives made up nearly 1% of total undergraduates in 2014; 60% were women and 40% were men.

Some hopeful data about the African American and Hispanic populations in the undergraduate student pipeline is that, despite continuing to be underrepresented among college and university students in the United States, their undergraduate enrollment is increasing at a faster pace than other population groups. Between 2000 and 2014, the number of African American undergraduates increased by 57%; the number of Hispanic graduates increased by 119%. Over the same time period, the undergraduate enrollment of American Indians/Alaska Natives increased by one tenth of 1%; Asian Americans by 27%; and Whites by 7% (NCES, 2015a). Each of the major population groups is represented in overall undergraduate education at or nearly at the same proportion as they are represented in the adult population of the United States. What is not shown, however, is that they are not similarly distributed along the college selectivity continuum. The African American, American Indian/Alaska Native, and Hispanic populations are severely underrepresented in the most selective colleges and universities, whereas the White and Asian American populations are overrepresented in those colleges and universities (Appendix G). Furthermore, if students were graduating in the same proportions as they are represented in enrollments, that could be viewed as a sign of progress toward achieving national degree attainment goals. Data presented in the remainder of the report, however, reveal the grave challenges of persistence and graduation.

Degree Completion

As described earlier in this report, African American, American Indian/Alaska Native, and Hispanic men and women are overrepresented among recent associate's degree recipients and are underrepresented among recent bachelor's degree

recipients. Although making up about 12.5% of the 25- to 64-year-old adult population, the African American population group overall made up 13.6% of associate's and 11% of bachelor's degree recipients in 2014. Despite their continuing underrepresentation among degree recipients, the positive trends of African American, American Indian/Alaska Native, and Hispanic undergraduates earning degrees over the past decade and a half are a sign of progress. Undergraduates in the African American group received 111% more associate's degrees and 72% more bachelor's degrees in 2014 than in 2000, American Indian/Alaska Native undergraduates received 56% more associate's degrees and 19% more bachelor's degrees, and Hispanic undergraduates received 192% more associate's degrees and 160% more bachelor's degrees over the same time period (NCES, 2015b, 2015c). The increased numbers of degrees earned by undergraduates in the African American and Hispanic populations compare favorably to the nation's overall increases in associate's and bachelor's degree completion over the same time period, which were 73% and 50%, respectively. Over that same time, there was a 46% increase in the number of associate's degrees awarded to undergraduates in the White population in a single year, a 31% increase in bachelor's degrees, and a 77% increase in associate's degrees as well as a 67% increase in the number of bachelor's degrees awarded to undergraduates in the Asian American population (NCES, 2015b, 2015c).

Time to Degree Completion

Time to degree may have less to do with substantially increasing the size of the pool of prospective degree recipients than with reducing the risk that those who are in the pipeline will flounder and be more likely to drop out. In addition to the representation of the African American, American Indian/Alaska Native, and Hispanic populations among associate's and bachelor's degree recipients, their time to degree completion is also an indicator worth monitoring as a way of forecasting degree progress and estimating the schedule for increased attainment. Rates of timeliness of degree completion are presented as the proportion of entering college students who graduate within 150% of the expected time needed to attain the degree. For associate's degrees, 150% of expected time is 3 years, and for bachelor's degrees, 150% of expected time is 6 years (see Table 12).

Among the major population groups, the African American population appears to have relatively low rates of timely completion of associate's degrees, and the American Indian/Alaska Native and Hispanic population groups experience relatively moderate rates, compared to the White and Asian American populations. Of the cohort of students entering public 2-year community colleges in 2010, approximately 11% of African American students, 15% of American Indian/Alaska Native students, and 16% of Hispanic students, compared to 22% of White students and 27% of Asian American students, completed associate's degrees within 3 years of initial enrollment (NCES, 2014c). The graduation rates for students enrolling in any type of 2-year college in 2010 (see Table 12) were much higher: 29% both of overall and of White students graduated with an associate's degree within 150% of designed time (or 3 years); 35% of Asian American students and 34% of Hispanic students but only 24% each of African American and American Indian/Alaska Native students completed within 150% of the designed time (NCES, 2014c).

At the bachelor's degree level, the American Indian/Alaska Native population group joins the African American population in having relatively low rates of timely completion, while the Hispanic population is closer to the higher rates of the White and Asian American groups. Roughly 45% of African American and 48% of American Indians/Alaska Native populations who entered public 4-year colleges and universities as first-time full-time freshmen in 2007 graduated within 6 years of entering. The time to completion rates of the African American and American Indian/Alaska Native populations compare unfavorably with those of other racial and ethnic groups, where 61% of the Hispanic population, 68% of the White population, and 77% of the Asian American population graduate college within 6 years of entering (NCES, 2014b).

The rates of completion vary as well by race, selectivity, and level of institution. Whereas nearly 70% of the Asian American population, 63% of the White population, and 53% of the Hispanic population who enter any bachelor's degree–granting institutions as full-time freshmen graduate within 6 years, less than half of the African American and American Indian/Alaska Native populations (each at 41%) do so (NCES, 2014b).

Degree Stop-Outs

Recruiting college stop-outs, former college students who have not completed a degree, for reentry into the postsecondary pipeline may be among the most promising strategies for substantially increasing degree attainment rates in the short

Table 12 Graduation Rates of Selected Institution Types by Race/Ethnicity

Group	2010 associate's degree 3-year completion rate (%)	2007 bachelor's degree nonprofit 6-year completion rate (%)	2007 6-year bachelor's completion rate: all institutions (%)
U.S. population	29.4	65.3	59.4
African American	23.7	44.7	40.8
American Indian/Alaska Native	24.0	47.9	40.6
Asian	35.4	77.0	70.0
Hispanic	33.8	60.9	52.5
White	29.4	68.3	62.9

Note. Data are from NCES 2014 Tables 326.20 and 326.10. Retrieved from: https://nces.ed.gov/programs/digest/2014menu_tables.asp

term toward achieving national goals. To achieve both the federal government's and Lumina Foundation's college degree attainment goals, the nation needs for its postsecondary institutions to dramatically increase degree production overall, and even more for underserved populations. Although some unconventional approaches can be expected to contribute to achieving the goals, the lion's share will be the result of efforts by conventional colleges and universities, including completion colleges. One strategy for achieving national degree attainment goals is to recruit, retain, and graduate students who were enrolled in college during an earlier time period but dropped out without earning a degree. Given that individuals with some college but no degree make up nearly a quarter of the adult population (Table 13, Column 2), they represent a potentially abundant source of additional college graduates who may possibly yield a large return on investment.

A substantial share of undergraduate students are pursuing degrees later than the conventional college age of 18–24. Approximately 18% of total undergraduate students are in the range of 25–34 years of age, and an additional 13% are in the 35–64 age range (NCES, 2013a, Table 1.1). The 25- to 34-year-olds represent 13% of full-time students and more than one quarter (26%) of part-time students, whereas 35- to 64-year-olds represent 7% of full-time and approximately 22% of part-time undergraduate students. Imploring conventional colleges and universities to expand further their credentialing and degree attainment efforts with the adult population across the range of 25–64 can be beneficial toward pursuing the nation's degree attainment goals. The 25- to 64-year-old population is much larger than the conventional college-age population (18–24) of entering students (nearly 10 times larger), and it includes 36 million people who at some point in their lives attended college but dropped out without earning a degree (Table 14). This group represents a pool to cultivate toward fulfilling college degree attainment goals.

People whose highest educational attainment is some college but no degree make up 23% of 25- to 34-year-olds and 22% of 25- to 64-year-olds (Tables 13 and 14). If the nation's colleges and universities, collectively, recruit and succeed in graduating 5% of the adult population of 25- to 34-year-olds whose highest degree designation is some college no degree, for each of the next 6 years, more than half (54%) of the number of degrees that are projected to be needed to achieve the national goal by 2020 would be awarded (see Table 13). The same strategy applied to the 25- to 64-year-old population would result in a reduction by nearly one third (32%) of the projected degrees needed to meet the 2025 goal (see Table 13). In 2014, a much larger share of the African American and American Indian/Alaska Native population groups in the 25- to 34-year-old population having some college but no degree was 29% and 28%, respectively (Table 13). Among 25- to 64-year-olds, their percentages were 26% and 27%, respectively (Table 14). But it is just the opposite for the Asian American population group, with 14% and 13%, respectively, of their 25- to 34-year-olds and 25- to 64-year-olds having some college and no degree as their highest educational attainment. At 21% and 18% for the two age groupings, respectively, the Hispanic group also has a relatively smaller representation of people whose highest degree attainment is some college but no degree. The White group is near the overall average at 23% and 22%, respectively, for the two age groups.

Applying the scenario of colleges and universities succeeding in enrolling and graduating 5% of people whose highest attainment level is some college with no degree, over the 6-year period from 2014 to 2020, the current projected degrees needed to reach the goal would be reduced by 74% for the African American population, 84% for the Hispanic population,

Table 13 2014 U.S. Population With Some College, No Degree, Ages 25-34 (Federal Goal)

Group	Percentage of U.S. population with associate's or bachelor's degree in 2014	Percentage of group with some college, no degree	Additional associate's or bachelor's degrees beyond projected number among U.S. population required to reach 60% attainment by 2020	5% of U.S. population with some college, no degree	Percentage reduction in total number of degrees needed with 5% per year for 6 years of attracting and succeeding with people who have dropped out
U.S. population	42.3	23.0	6,488,593	497,581	54.0
African American ^a	29.0	29.2	1,890,280	82,756	73.7
Men	23.4	27.8	1,165,367	37,646	80.6
Women	34.1	30.5	743,284	45,111	63.6
American	21.0	28.4	144,012	4,057	83.1
Indian/Alaska					
Native ^b					
Men	17.5	27.7	80,260	1,960	85.3
Women	24.4	29.2	63,924	2,097	80.3
Asian ^c	68.4	14.3	d	20,602	d
Men	66.2	15.6	d	10,670	d
Women	70.4	13.2	d	9,932	d
Hispanic ^e	21.9	21.3	3,404,310	89,997	84.1
Men	18.2	19.7	2,041,086	43,545	87.2
Women	26.0	23.1	1,384,733	46,452	79.9
Whitef	49.6	22.9	1,474,340	281,908	d
Men	44.2	23.4	1,535,909	145,844	43.0
Women	55.1	22.4	d	136,064	d

Note. nec = not elsewhere categorized. The data for races exclude Hispanic, and race combination is not included. The following variables from the ACS were combined for this table: (a) some college, but less than 1 year; (b) 1 or more years of college credit, no degree. Data are from American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

^aIncludes all Black non-Hispanic population ages 25–34. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–34. Does not include other race, nec, two major races, three or more major races. ^dGroup has or will have met 60% by 2020, calculation not applicable. ^cIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–34. Does not include two major races; three or more races. ^fIncludes all White non-Hispanic population ages 25–34.

and 83% for American Indian/Alaska Native population in the age span of 25–34 (Table 13, Column 8). For the 25- to 64-year-old age range, degrees and certificates needed to reach the goal would be reduced by 54% for the African American group, 80% for the Hispanic population, and 67% for the American Indian/Alaska Native population (Table 14). The benefit of achieving degree attainment goals by investing in this population of adults with some college but no degree could be substantial. At the same time, however, substantial growth in college degrees from this segment of the adult population may also require innovative investment strategies and elevate the demand for both quality assurance and research to monitor student outcomes.

Conclusion

Setting and even achieving numerical postsecondary educational goals was not unprecedented in the United States when the 2009 degree attainment goals were established. Even ambitious goals and timelines like the degree attainment goals of the Obama administration and Lumina Foundation have been set and achieved in the past. In 1947, for example, President Truman announced his national goal of doubling higher education enrollment by 1960. At the time of Truman's

Table 14 2014 U.S. Population With Some College, No Degree, Age 25-64 (Lumina Goal)

	Percentage of U.S. population with associate's or bachelor's degree in 2014	Percentage of group with some college, no degree	Additional associate's or bachelor's degrees beyond projected number among U.S. population required to reach 60% attainment by 2025	5% of U.S. population with some college, no degree	Percentage reduction in total number of degrees needed with 5% per year for 10 years of attracting and succeeding with people who have dropped out
U.S. population	40.4	21.6	26,659,592	1,808,908	32.1
African American ^a	29.3	26.4	5,851,975	272,084	53.5
Men	24.7	24.9	3,566,905	120,369	66.3
Women	33.4	27.7	2,311,038	151,716	34.4
American Indian/Alaska Natives ^b	23.6	26.9	445,931	14,614	67.2
Men	20.2	25.6	253,130	6,741	73.4
Women	26.8	28.1	193,436	7,874	59.3
Asian ^c	60.8	13.3	d	65,858	d
Men	61.2	14.0	d	32,411	d
Women	60.4	12.6	d	33,447	d
Hispanic ^e	21.1	18.4	12,142,671	242,079	80.1
Men	18.5	17.5	7,036,687	116,931	83.4
Women	23.8	19.4	5,167,914	125,148	75.8
White ^f	45.7	22.0	8,683,702	1,165,934	d
Men	42.7	21.9	7,162,773	576,653	19.5
Women	48.6	22.2	1,554,245	589,281	d

Note. nec = not elsewhere categorized. The data for races exclude Hispanic, and race combination is not included. The following variables from the ACS were combined for this table: (a) some college, but less than 1 year; (b) 1 or more years of college credit, no degree. Data are from American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–64. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–64. Does not include other race, nec, two major races, three or more major races. ^dGroup has or will have met 60% by 2025, calculation not applicable. ^cIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–64. Does not include two major races; three or more races. ^fIncludes all White non-Hispanic population ages 25–64.

announcement, there were 2.3 million students enrolled in the nation's colleges and universities. By 1963, enrollments had indeed doubled to 4.7 million. But the goals were not accomplished without extraordinary innovations and progressive policies. Establishing community colleges and federal student financial aid for veterans of the military and, later, for the broader population were among the innovations. The expansion of adult education and ending racial and religious discrimination in higher education were among these progressive policy pronouncements made by President Truman (President's Commission on Higher Education's, 1947).

Other national initiatives affecting numerical student representation in higher education were the Great Society programs of the President Lyndon B. Johnson administration. While President Johnson was clear about the monumental challenges that lay ahead of the country, his goals were not quantified in the same way that college enrollment was by President Truman and degree attainment was by President Obama. President Johnson clearly described, however, the conditions of inequality in the nation, and he was explicit about the main goal of the Great Society programs being to eliminate both poverty and racial injustice. He introduced and gained congressional support for a variety of legislation, including the Elementary and Secondary Education Act of 1965 (Johnson, 1965) and the Higher Education Act of 1965. Both actions provided a broad range of support to states for strengthening colleges and universities and financial aid to individual students and they endure through the present.

President George H. W. Bush and the governors of the 50 states set goals during a national summit convened by the president in Charlottesville, Virginia, in 1989 (National Education Goals Panel [NGEP], n.d.). At that time, the president

and the governors announced six goals that were aimed toward elementary and secondary education and focused primarily on children's readiness to enter school, the quality of teaching and learning, international competitiveness of students in mathematics and science, students' academic achievement in rigorous courses and subject matter, and school completion. For more than a decade after initially announcing the goals to the public in 1990, the government began monitoring progress toward achieving the goals, establishing a new nongovernmental entity called the NEGP, which for more than a decade produced periodic reports of the nation's progress toward achieving the goals. The NEGP was discontinued in 2002 with the enactment of No Child Left Behind (NGEP, 2002).

President Obama's actions in setting educational achievement goals for the nation that emphasize both K-12 and post-secondary education, with a particular emphasis on college completion, are in keeping with this tradition of presidential leadership on educational policy. Having a major philanthropic foundation provide assistance in the way that Lumina Foundation has may be unprecedented. The degree attainment goals set forth by the federal government under the leadership of President Obama and by Lumina Foundation provide the public with targets that they argue will contribute to the sustainability, growth, and prosperity of the nation (Lumina Foundation, 2015; Obama, 2009).

As with the national educational goals of 1989 and subsequent goals established by the two successive presidential administrations (William J. Clinton and George W. Bush) that preceded President Obama's degree attainment goals, there is explicit value in monitoring and informing the public about progress needed to attain the goal, and conducting analyses of strengths and limitations of the process and results.

The overwhelming focus of the nation's public resources through national and state government departments of education is on disadvantaged segments of the population. Changes that are under way in the demographic composition of the nation, with a larger share of the Hispanic and Asian American populations and larger proportions of African American and American Indian/Alaska Native populations who are socially and economically disadvantaged, underscore the necessity of focused initiatives aimed at improving college attainment rates for underserved populations.

The data presented and analyzed in this report illustrate the relative progress toward major population groups toward the degree attainment goals and some of the effort required to make progress in achieving the goals. By assessing the trajectories toward college degree attainment goals and challenges faced by various population groups thus far, the analyses lead to the conclusion that in addition to monitoring the various segments of the population, extraordinary innovations and policies yet to be introduced and enacted are needed in order to accelerate the pace of major segments of the nation's population that experience the greatest need, namely, African American, American Indian/Alaska Native, and Hispanic populations.

As a growing and high-achieving segment of the U.S. population, Asian Americans have already achieved the nation's degree attainment goals, and it will be shown in a companion report (Nettles, 2017) that they are also setting the pace in academic achievement and performance. The other major population groups have not achieved the goals, but White women are on track to achieve both the 2020 and 2025 targets by or near the target years. White men and African American, American Indian/Alaska Native, and Hispanic men and women are on varied slower pathways to degree attainment goals. Among these population groups, White males are projected to arrive at the federal government goal by 2038 but not to reach Lumina Foundation's goal until 2046. Given where they are starting and what they have for support, the African American population overall, the American Indian/Alaska Native population overall, and Hispanic women have a steep climb ahead, and the climb is even steeper for men of each of these three groups than it is for women. For the population groups that are presently lagging, achieving the goals by 2020, 2025, or any time in the foreseeable future will require extraordinary new initiatives.

The federal government has had substantial partners in the nation's leading philanthropic foundations in several of its educational policy initiatives. These philanthropic organizations are investing substantial resources. Regarding college degree attainment goals, Lumina Foundation's agenda has been clearly aligned. In addition to supporting strategies to improve academic achievement and degree attainment, there is significant need to publicly identify and address the unique circumstances of severely and chronically underachieving, underrepresented, and underserved populations of African American, American Indian/Alaska Native, and Hispanic men and women with efforts that are tailored to their particular circumstances. Data and analyses presented in a forthcoming report will reveal how African American men and women trail other major population groups on every meaningful aspect of college and career readiness. Many of their relatively poor conditions and circumstances inside and outside of school cry out for extraordinary attention. The American Indian/Alaska Native and Hispanic populations also trail their Asian American and White counterparts and

have much ground to cover toward meeting college attainment goals. Their educational and socioeconomic conditions, while different from African Americans', also beg for extraordinary attention.

President Obama's educational policies may have been a catalyst for achieving educational equity and providing the kind of stimulus that African American, American Indian/Alaska Native, and Hispanic populations need to eventually achieve national goals and close gaps. But these policies may also need components that are tailored for and targeted more to the particular needs of the population groups to accelerate their pace.

Lessons learned from implementing President Truman's educational goal can be instructive in the pursuit of President Obama's ambitious educational goal. On the way to achieving Truman's goal in 1963, one innovation in the delivery system that changed the landscape of American higher education was the development and spread of community colleges throughout the United States (Boggs, 2010; NCES, 2013b; President's Commission on Higher Education's, 1947). Many such game-changing innovations may emerge as the nation progresses toward the goal of regaining preeminence in education, and extraordinary efforts and innovations are needed to ensure that African American, American Indian/Alaska Native, and Hispanic populations accelerate their progress in closing gaps with other population groups toward higher rates of degree attainment.

A forthcoming report (Nettles, 2017) will address three key precollege preparation factors for long-term college degree attainment success of these underserved populations. These key matters of preparation include academic, financial, and social preparation. The kinds of questions that will be addressed include the following:

- What are the current gaps in preparation?
- What changes are needed to close the gaps?
- What are the sustainable funding models required to support innovations and promote new strategies (Boyd & Lubbers, 2017)?

Acknowledgments

I began conceptualizing the work presented in this report soon after President Obama, the U.S. Department of Education, and Lumina Foundation established their 60% college completion goals in 2009. I began by talking with then president of ETS Kurt Landgraf about the need to monitor progress of the nation and especially underrepresented and disadvantaged populations toward achieving the new goal. Kurt allowed me to invite Martha Kanter, deputy secretary of education; James Applegate, vice president of Lumina Foundation; and Irving Hamer, deputy superintendent of the Memphis City Schools System to discuss the goals with the ETS Board of Trustees in 2012. My conversation about the need for this report has continued with Kurt's successor, Walt MacDonald, since 2013. Walt has been very supportive and has viewed it as part of the long tradition of interest in advancing quality and equity in U.S. higher education. I am grateful to Kurt and Walt and the ETS Board of Trustees for their support and encouragement, without which the time and resource allocation required to produce this report would not have been possible.

I am also grateful to my colleagues at ETS for being supportive of the idea and the work. From the early stages through the present, I have been discussing the project, its status, and its relevance with Catherine Millett and Jonathan Rochkind, two leaders at ETS in the Policy Evaluation and Research Center (PERC). I appreciate Catherine's and Jon's steady support and encouragement throughout the project, Catherine's listening and advising on data sources and analyses, and Jon's allocating and supporting valuable time from our staff resources to the project and supporting each one through the process. From the beginning in 2012, I have had the support of a talented succession of colleagues, also in the PERC, beginning with Rob Schwartz, a research associate, followed successively by senior research associate Janay Cody, senior data analyst Haijiang Wang, and senior research assistant Daniel Fishtein. I am very appreciative of each of them for her or his dedication and commitment, which have been an ongoing integral part of producing this report. We learned many lessons about the data and analyses presented in the report as we worked together through varying stages of the project. I am very grateful to Stephanie Saunders, senior research associate, for her valuable feedback during the final stage of producing the report and for her editing on both content and layout. Additional former and current ETS colleagues for whom I am very grateful are Eileen Freund, who provided editing and data-organizing assistance during an earlier period of the project; Beata Maciolek, for reviewing the penultimate draft; Daniel McCaffrey and Jonathan Steinburg, for statistical consultation; and Nimmi Devasia, for data analysis assistance in updating the college selectivity table. I thank

also Jim Carlson, JoAnn Rock, and Maria Oliveri, who provided thoughtful reviews and feedback on an earlier version of this report.

A study of population demographics of the nation that is as committed as this project is to exhaustive data analysis and presentation benefits from the periodic advice of a leading population studies expert. Richard Fry, senior researcher at the Pew Research Center and a member of the PERC Advisory Committee, has been that expert during much of this project. I appreciate all of Rick's advice, but especially for steering us away from the Current Population Survey and into the ACS and for his advice on historical time frames and methods for projecting future degree attainment rates. I feel that accepting Rick's advice on these and other methodological issues has been beneficial to the project.

Both Lumina Foundation and NORC at the University of Chicago (an "independent affiliate with deep research ties to the university") have invested in producing the best and likely the only generalizable data on certificates that meet Lumina Foundation's criterion of "high quality." I am very grateful to both Courtney Brown, vice president of strategic impact for Lumina Foundation, and Bronwyn Nichols Lodato, senior vice president at NORC at the University of Chicago, who each separately listened to my need, and request, for the data and separately vetted the idea and request. They were then unconditionally generous in providing support and access to data. Bronwyn and Michael Yang, senior statistician for NORC at the University of Chicago, even approved and produced race and gender estimates of high-quality certificates from their national survey that are included in the report. Thanks to each of them for their support.

I sought the advice of Anthony Carnevale, director of the Georgetown University Center for Education and Workforce, on the growth of new jobs for college degree recipients and forecasts of future labor markets. I thank Tony and his colleague Jeff Strohl, director of research, for their time in talking about the goals and the labor market and for guiding us to appropriate data sources from the U.S. Bureau of Labor Statistics.

I feel very fortunate to have had great support and advice in producing this report. Ultimately, I made the decisions about the data and analyses and the interpretations and perspectives in the report, and therefore I take full responsibility for all of the content and perspectives presented in this report.

Notes

- 1 All references to race groups (African American, American Indian/Alaska Native, Asian, and White) refer to non-Hispanic populations. The Hispanic population is treated as a distinct group. Multirace and race/ethnicity combinations are not examined separately but are included in total U.S. population estimates.
- 2 Two areas of overlap within the career clusters should be noted: (a) Registered nurses are also included in the health care services grouping to highlight specific occupations (along with pre-K-12 teachers) that require a bachelor's degree and (b) financial specialists are also included under managerial and professional office in keeping with Carnevale et al.'s (2010) analysis.
- 3 Observing status and trends of degree attainment for the adult population can be conducted using the Current Population Survey (CPS) or the American Community Survey (ACS; both of which are fielded by the U.S. Census Bureau), but they yield different estimates of degree attainment. One important distinction is that the CPS excludes the national institutionalized population (such as those in correctional facilities and nursing homes), whereas the ACS includes the entire U.S. population. A second important distinction is the fact that the size of the ACS sample greatly exceeds that of the CPS, facilitating more accurate estimates of smaller population groups (Pew Reasearch Center, 2016). The U.S. Department of Education (2012a) began the process of monitoring the national degree attainment goal using the ACS, but its most recent report relies on the CPS (U.S. Department of Education, 2016). The difference in degree attainment estimates for the 25- to 34-year-old population is roughly 3 percentage points: In 2014, the rate of degree attainment was 45.7% using CPS estimates compared to 42.3% using ACS estimates.
- 4 The ACS is used to measure and project degree attainment. While the estimates of bachelor's degree holders include advanced degree (e.g., master's and doctoral) holders, these segments of the population have attained *at least* a bachelor's degree.
- 5 Percentage of goal, separate from attainment rate, is defined as the amount of progress made toward reaching 60% attainment. For example, if a group had 30% attainment, they would have met 50% of the goal.
- 6 By weighting future degree attainment rates by current (2014) population shares, an overall U.S. population rate was derived for both age groups. The current rate was then subtracted and a new average rate of growth for degree attainment was used to estimate when the U.S. population would reach 60% degree attainment assuming a constant population distribution.
- 7 Average calculated from AY 2000 2001 through AY 2013 2014.
- 8 A stop out is a temporary disruption in college attendance.
- 9 Completion colleges are colleges or programs that focus primarily on supporting adult learners with previous college credit.

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Appendix A: Occupational Fields and Industry Clusters Expected to Demand the Highest Concentration of Postsecondary Education in 2020

Data are from the 2014 ACS, variable occ2010 (occupation, 2010 basis). The six demand areas are a combination of specific occupations and industry clusters that appear in the ACS. This combination leads to two areas of overlap: (a) Registered nurses also appear in the health care services industry cluster and (b) financial service occupations are included separately and within the management and professional office cluster. Abbreviation "nec" stands for "not elsewhere categorized."

Registered Nurses Pre-K-Grade 12 Teachers

Postsecondary Teachers Preschool and Kindergarten Teachers Elementary and Middle School Teachers Secondary School Teachers Special Education Teachers

Financial Specialists

Accountants and Auditors

Appraisers and Assessors of Real Estate

Budget Analysts

Credit Analysts

Financial Analysts

Personal Financial Advisors

Insurance Underwriters

Financial Examiners

Credit Counselors and Loan Officers

Tax Examiners and Collectors, and Revenue Agents

Tax Preparers

Financial Specialists, nec

Health Care Services

Health Care Practitioners and Technical Occupations

Chiropractors

Dentists

Dieticians and Nutritionists

Optometrists

Pharmacists

Physicians and Surgeons

Physician Assistants

Podiatrists

Registered Nurses

Audiologists

Occupational Therapists

Physical Therapists

Radiation Therapists

Recreational Therapists

Respiratory Therapists

Speech Language Pathologists

Therapists, nec

Veterinarians

Health Diagnosing and Treating Practitioners, nec

Clinical Laboratory Technologists and Technicians

Dental Hygienists

Diagnostic Related Technologists and Technicians

Emergency Medical Technicians and Paramedics

Health Diagnosing and Treating Practitioner Support Technicians

Licensed Practical and Licensed Vocational Nurses

Medical Records and Health Information Technicians

Opticians, Dispensing

Health Technologists and Technicians, nec

Healthcare Practitioners and Technical Occupations, nec

Health Care Support

Nursing, Psychiatric, and Home Health Aides

Occupational Therapy Assistants and Aides

Physical Therapist Assistants and Aides

Massage Therapists

Dental Assistants

Medical Assistants and Other Health Care Support Occupations, nec

Stem

Computer and Mathematical

Computer Scientists and Systems Analysts/Network systems Analysts/Web Developers

Computer Programmers

Software Developers, Applications and Systems Software

Computer Support Specialists

Database Administrators

Network and Computer Systems Administrators

Actuaries

Operations Research Analysts

Statisticians

Mathematical Science Occupations, nec

Architecture and Engineering

Architects, Except Naval

Surveyors, Cartographers, and Photogrammetrists

Aerospace Engineers

Chemical Engineers

Civil Engineers

Computer Hardware Engineers

Electrical and Electronics Engineers

Environmental Engineers

Industrial Engineers, Including Health and Safety

Marine Engineers and Naval Architects

Materials Engineers

Mechanical Engineers

Petroleum, Mining, and Geological Engineers, Including Mining Safety Engineers

Engineers, nec

Drafters

Technicians

Engineering Technicians, Except Drafters Surveying and Mapping Technicians

Life, Physical, and Social Sciences

Agricultural and Food Scientists

Biological Scientists

Conservation Scientists and Foresters

Medical Scientists, and Life Scientists, All Other

Astronomers and Physicists

Atmospheric and Space Scientists

Chemists and Materials Scientists

Environmental Scientists and Geoscientists

Physical Scientists, nec

Agricultural and Food Science Technicians

Biological Technicians

Chemical Technicians

Geological and Petroleum Technicians, and Nuclear Technicians

Life, Physical, and Social Science Technicians, nec

Professional, Research, or Technical Workers, nec

Management and Professional Office

Management, Business, Science, and Arts

Chief Executives and Legislators/Public Administration

General and Operations Managers

Managers in Marketing, Advertising, and Public Relations

Administrative Services Managers

Computer and Information Systems Managers

Financial Managers

Human Resources Managers

Industrial Production Managers

Purchasing Managers

Transportation, Storage, and Distribution Managers

Farmers, Ranchers, and Other Agricultural Managers

Constructions Managers

Education Administrators

Architectural and Engineering Managers

Food Service and Lodging Managers

Funeral Directors

Gaming Managers

Medical and Health Services Managers

Natural Science Managers

Property, Real Estate, and Community Association Managers

Social and Community Service Managers

Managers, nec (Including Postmasters)

Business Operations Specialists

Agents and Business Managers of Artists, Performers, and Athletes

Buyers and Purchasing Agents, Farm Products

Wholesale and Retail Buyers, Except Farm Products

Purchasing Agents, Except Wholesale, Retail, and Farm Products

Claims Adjusters, Appraisers, Examiners, and Investigators

Compliance Officers, Except Agriculture

Cost Estimators

Human Resources, Training, and Labor Relations Specialists

Logisticians

Management Analysts

Meeting and Convention Planners

Other Business Operations and Management Specialists

Financial Specialists

Accountants and Auditors
Appraisers and Assessors of Real Estate
Budget Analysts
Credit Analysts
Financial Analysts
Personal Financial Advisors
Insurance Underwriters
Financial Examiners
Credit Counselors and Loan Officers
Tax Examiners and Collectors, and Revenue Agents
Tax Preparers
Financial Specialists, nec

Legal

Lawyers, Judges, Magistrates, and Other Judicial Workers Paralegals and Legal Assistants Legal Support Workers, nec

Appendix B: Projection and Rate of Change in Degree Attainment—Race/Ethnicity and Gender Methodology

Introduction

This is the description of the data and analyses employed in the third section of the report to forecast degree attainment rates of 25- to 34-year-olds and 25- to 64-year-olds. These are the two adult population groups that are the focus of the U.S. government's 2020 degree attainment goals and Lumina Foundation's 2025 degree attainment goals, respectively. The projections feature forecasts of attainment rates for both the target years of 2020 and 2025 and for each year until either the goal is achieved or 2060 for each population race and gender group. The five race groups included in the analyses are African Americans, American Indian/Alaska Native, Asian American, Hispanics, and White as well as men and women of each racial group.

Projection Data Sources: Associate's Degrees and Higher

The data sources for these projections include the 2014 ACS as well as the U.S. Census Bureau's 1990 decennial census via IPUMS and the U.S. Census Bureau's 2014 National Population Projections: Table 1, "Projected Population by Single Year of Age, Sex, Race, and Hispanic Origin for the United States: 2014 to 2060."

Projection Data Sources: High-Quality Certificates

Lumina Foundation, in collaboration with NORC at the University of Chicago, produced estimates of high-quality degree attainment (as the highest credential attained) for the U.S. population, African American, White, and Hispanic populations, for the 25- to 64-year-old age group. These estimates were reported in Lumina Foundation's Stronger Nation 2016 report. The gender breakdowns for each racial group were obtained from NORC by request and include standard errors. These estimates were produced using the data collected on behalf of Lumina Foundation through the National Education and Employment Study. NORC estimated the rates of high-quality certificate attainment to match Lumina Foundation's criteria, but only for a single time point, which prohibits meaningful predications of rate of change; therefore a constant rate was assumed to carry into the future for each group. Though these rates were assumed to be stagnant, derived future certificate *totals* increase or decrease mirroring population changes predicated by the U.S. Census Bureau.

Projection Methodology

Degree attainment projections are estimated based on historical attainment trends for White, African American, Hispanic, Asian American, American Indian/Alaska Native, and total U.S. populations, ages 25–34 as well as 25–64, collected through the ACS for years 2006 and 2014 as well as through the 1990 census. To produce these estimates, annual associate's degree and "bachelor's degree and above" attainment totals for each age, racial/ethnic, and gender group were retrieved from IPUMS and tabulated using the Online Tabulator for two separate time periods, 1990–2014 and 2006–2014, to produce the change in degree attainment rate over different time spans (associate's degrees and "bachelor's degrees and above" totals were combined for these analyses). Degree attainment rates for the U.S. government goals were calculated by dividing the total number of 25- to 34-year-olds in the U.S. population with associate's or bachelor's degrees and above by the total population of the same age span using the following formula:

$$\frac{\text{Total population with associate's and bachelor's degrees}}{\text{Total population}} = \text{Degree attainment rate}.$$

The process was repeated for each racial/ethnic and gender subgroup.

Rate Change Methodology

Average yearly changes in attainment rates were calculated by subtracting the current observed rate (2014) from the historical rate (2006 and 1990, respectively) for each time horizon and then dividing by the respective number of years using the following formula:

```
\frac{\text{Current attainment rate} - \text{Starting attainment rate}}{\text{Total number of years in time horizon}} = \text{Average yearly change in rate of attainment.}
```

The most recent time horizon (2006–2014) was selected as the primary basis for projecting annual rates of attainment for two reasons: (a) The year 2014 is the most recent year of ACS data available and (b) 2006 is the first year in which the ACS began surveying the entire U.S. population, which includes the institutionalized population, such as those in nursing homes, prisons, and college dormitories. Prior to 2006, the ACS was only administered to U.S. households (Pew Research Center, 2016). A second time horizon, 1990–2014, uses the 1990 census (which surveys an even larger sample of the entire U.S. population) and again the 2014 ACS to provide an alternative view of how degree attainment may grow in the future.

Projected average annual rates of change in associate's or bachelor's degrees from 2014 to 2020, depicted in Tables 7–9, were used to project degree attainment rates and, in turn, totals for each successive year. The annual rates of change in associate's and bachelor's degrees were added each year beginning with 2014 actual rates derived from the ACS. Finally, totals were calculated by multiplying the projected attainment rates by yearly population totals obtained from the U.S. Census Bureau's 2014 National Population Projection, Table 1, "Projected Population by Single Year of Age, Sex, Race, and Hispanic Origin for the United States: 2014 to 2060."

Projection for 25–64 Age Group Cohort

Projections of the degree attainment for Lumina Foundation's goal are for a population roughly four times larger than the population targeted for the federal government's degree attainment goal. Given that the college degree attainment rates of each successive quartile of the population (25-34, 35-44, 45-54, and 55-64) differ and our projections extend to 2060, we added one additional step in projecting Lumina Foundation's goal attainment to account for the replacement of the older quartiles as present quartiles age through the total age group, and younger quartiles age into it. The trajectory of the cohorts can be visualized using Figure B1.

Per Figure B1, as each cohort advances in 10-year increments, it enters the next 10-year age group and replaces the previous group completely. This approach is grounded in the assumption that there will be little change in a group's attainment as they exit out of the 25- to 34-year-old age range.

Present and projected degree attainment for the 25–34 group was used as the basis for increases in degree attainment that the group would carry into the future, and the methodology described in the first section of this appendix was used to project their rate of increase in attainment accordingly. Baseline observed rates were established and carried forward for Cohorts 2, 3, and 4 until they aged out of the model and were replaced by the previous age group and their baseline

			Age l	Range					
			25	-64					
Year Span	15-24	25-34	35-44	45-54	55-64	65-74			
2014 - 2023	Cohort 0	Cohort 1	Cohort 2	Cohort 3	Cohort 4				
2024 - 2033	Cohort -1	Cohort 0	Cohort 1	Cohort 2	Cohort 3	Cohort 4			
2034 - 2043	Cohort -2	Cohort -1	Cohort 0	Cohort 1	Cohort 2	Cohort 3	Cohort 4		
2044 - 2053	Cohort -3	Cohort -2	Cohort -1	Cohort 0	Cohort 1	Cohort 2	Cohort 3	Cohort 4	
2054 - 2063		Cohort -3	Cohort -2	Cohort -1	Cohort 0	Cohort 1	Cohort 2	Cohort 3	Cohort 4

Figure B1 Trajectory of age 24-64 cohort. Note that the U.S. Census Bureau does not provide census projections beyond the year 2060

attainment rate. Cohorts 1, 0, -1, -2, and -3 picked up or began with the already projected future rates of attainment established in the 25-34 quartile as they aged into and through the model. This approach can be expressed in the following formula, where *R* is equal to age range (e.g., 25-34) and *N* is equal to year (e.g., 2014):

Att.
$$rate_N$$
 for Age $Group_R = Att. Rate_{N+10}$ for Age $Group_{R+10}$.

Following the preceding formula, the attainment rate for Age Group 35–44 in Year 2024 will be equal to that of Age Group 25–34 in Year 2014, as the cohort has aged fully into the next age group, carrying with it the same attainment rate. Degree totals were derived for each of the four age groups for each year between 2014 and 2060 by applying the projected rates to U.S. census population projections. The subsequent four totals were then summed to produce a grand total of projected total degrees attained. The reverse was done to derive grand total attainment rates, where the projected total degrees were divided by the U.S. census population estimates for the entire 25–64 age group. This method was followed for all attainment projections of the 25- to 64-year-old group, including the 1990–2014 horizon (Appendix D), the addition of certificates (Table 9), and the comparison of growth between associate's and bachelor's degrees (Appendix F).

Appendix C: Projected Year of 60% Attainment

Table C1 Projected Year of 60% Associate's and Bachelor's Degree Attainment by Race and Gender, Ages 25-34 (Based on Rates Observed From 2006 to 2014)

	U.S.	Afri Ame	can erican	a (%)	Ameri Alaska		ndian/ ve ^b (%)	As	sian ^c (%)	His	oanic ^d	(%)	W	hite ^e ((%)
	population	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Womer
2014	42.3	29.0	23.4	34.1	21.0	17.5	24.4	68.4	66.2	70.4	21.9	18.2	26.0	49.6	44.2	55.1
2015	42.9	29.4	23.6	34.7	21.2	17.7	24.6				22.5	18.7	26.7	50.4	44.9	56.0
2016	43.6	29.8	23.8	35.3	21.3	17.8	24.8				23.2	19.3	27.4	51.1	45.5	56.9
2017	44.2	30.2	24.0	35.8	21.5	18.0	25.1				23.8	19.8	28.1	51.9	46.1	57.8
2018	44.9	30.6	24.3	36.4	21.7	18.2	25.3				24.5	20.3	28.8	52.6	46.8	58.7
2019	45.5	31.0	24.5	37.0	21.9	18.3	25.5				25.1	20.9	29.5	53.4	47.4	59.6
2020	46.2	31.4	24.7	37.6	22.1	18.5	25.8				25.7	21.4	30.2	54.2	48.1	
2021	46.8	31.8	24.9	38.2	22.3	18.6	26.0				26.4	22.0	30.9	54.9	48.7	
2022	47.5	32.3	25.1	38.8	22.5	18.8	26.2				27.0	22.5	31.6	55.7	49.3	
2023	48.1	32.7	25.3	39.4	22.7	19.0	26.5				27.7	23.1	32.3	56.5	50.0	
2024	48.7	33.1	25.5	39.9	22.9	19.1	26.7				28.3	23.6	33.0	57.2	50.6	
2025	49.4	33.5	25.8	40.5	23.0	19.3	26.9				29.0	24.1	33.7	58.0	51.3	
2026	50.0	33.9	26.0	41.1	23.2	19.5	27.2				29.6	24.7	34.4	58.8	51.9	
2027	50.7	34.3	26.2	41.7	23.4	19.6	27.4				30.2	25.2	35.1	59.5	52.5	
2028	51.3	34.7	26.4	42.3	23.6	19.8	27.6				30.9	25.8	35.8		53.2	
2029	52.0	35.1	26.6	42.9	23.8	19.9	27.9				31.5	26.3	36.5		53.8	
2030	52.6	35.5	26.8	43.5	24.0	20.1	28.1				32.2	26.9	37.2		54.5	
2031	53.3	35.9	27.0	44.0	24.2	20.3	28.3				32.8	27.4	37.9		55.1	
2032	53.9	36.3	27.3	44.6	24.4	20.4	28.6				33.4	28.0	38.6		55.7	
2033	54.5	36.8	27.5	45.2	24.5	20.6	28.8				34.1	28.5	39.3		56.4	
2034	55.2	37.2	27.7	45.8	24.7	20.7	29.0				34.7	29.0	40.0		57.0	
2035	55.8	37.6	27.9	46.4	24.9	20.9	29.3				35.4	29.6	40.7		57.7	
2036	56.5	38.0	28.1	47.0	25.1	21.1	29.5				36.0	30.1	41.4		58.3	
2037	57.1	38.4	28.3	47.5	25.3	21.2	29.7				36.6	30.7	42.1		58.9	
2038	57.8	38.8	28.5	48.1	25.5	21.4	30.0				37.3	31.2	42.8		59.6	
2039	58.4	39.2	28.8	48.7	25.7	21.6	30.2				37.9	31.8	43.5			
2040	59.1	39.6	29.0	49.3	25.9	21.7	30.4				38.6	32.3	44.2			
2041	59.7	40.0	29.2	49.9	26.1	21.9	30.7				39.2	32.8	44.9			
2042		40.4	29.4	50.5	26.2	22.0	30.9				39.8	33.4	45.6			
2043		40.8	29.6	51.1	26.4	22.2	31.1				40.5	33.9	46.3			
2044		41.3	29.8	51.6	26.6	22.4	31.4				41.1	34.5	47.0			
2045		41.7	30.0	52.2	26.8	22.5	31.6				41.8	35.0	47.7			
2046		42.1	30.3	52.8	27.0	22.7	31.8				42.4	35.6	48.4			
2047		42.5	30.5	53.4	27.2	22.8	32.1				43.0	36.1	49.1			
2048		42.9	30.7	54.0	27.4	23.0	32.3				43.7	36.6	49.8			
2049		43.3	30.9	54.6	27.6	23.2	32.5				44.3	37.2	50.5			
2050		43.7	31.1	55.1	27.7	23.3	32.8				45.0	37.7	51.1			
2051		44.1	31.3	55.7	27.9	23.5	33.0				45.6	38.3	51.8			
2052		44.5	31.6	56.3	28.1	23.7	33.2				46.2	38.8	52.5			
2053		44.9	31.8	56.9	28.3	23.8	33.5				46.9	39.4	53.2			
2054		45.3	32.0	57.5	28.5	24.0	33.7				47.5	39.9	53.9			
2055		45.8	32.2	58.1	28.7	24.1	33.9				48.2	40.4	54.6			
2056		46.2	32.4	58.7	28.9	24.3	34.2				48.8	41.0	55.3			
2057		46.6	32.6	59.2	29.1	24.5	34.4				49.4	41.5	56.0			
2058		47.0	32.8	59.8	29.3	24.6	34.6				50.1	42.1	56.7			
2059		47.4	33.1		29.4	24.8	34.9				50.7	42.6	57.4			
2060		47.8	33.3		29.6	24.9	35.1				51.4	43.2	58.1			

Note. The data for races exclude Hispanic, and race combination is not included. See Appendix B for full methodology. Data are from U.S. Census Bureau 2020. Population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2013, IPUMS Online Tabulator, https://usa.ipums.org/usa/. The year 2020 is shaded gray to highlight the target year of the goal set forth by President Obama. Annual rates that round up to or exceed 60% attainment are also shaded to highlight groups that have or are projected to reach the goal in the 2014-2060 timeline.

Table C2 Projected Year of 60% Associate's and Bachelor's Degree Attainment by Race and Gender, Ages 25-64 (Based on Rates Observed From 2006 to 2014)

U.S. population Overall Men Won 2014 40.4 29.3 24.7 33. 2015 40.6 29.4 24.7 33. 2016 40.8 29.5 24.8 33. 2017 40.9 29.6 24.8 33. 2018 41.1 29.7 24.9 34. 2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.		20.2 20.2 20.3 20.3 20.4 20.4 20.4	Women 26.8 26.8 26.9 26.9 27.0 27.0	Overall 60.8	Men 61.2	Women 60.4	Overall 21.1 21.3	Men 18.5 18.7	Women 23.8	Overall 45.7	Men 42.7	Women 48.6
2015 40.6 29.4 24.7 33. 2016 40.8 29.5 24.8 33. 2017 40.9 29.6 24.8 33. 2018 41.1 29.7 24.9 34. 2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.6 23.7 23.7 23.8 23.8 23.9 23.9	20.2 20.3 20.3 20.4 20.4 20.4	26.8 26.9 26.9 27.0	60.8	61.2	60.4			23.8	45.7	42.7	48.6
2016 40.8 29.5 24.8 33. 2017 40.9 29.6 24.8 33. 2018 41.1 29.7 24.9 34. 2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.7 23.8 23.8 23.9 23.9	20.3 20.3 20.4 20.4 20.4	26.9 26.9 27.0				21.3	187		1017	12.7	10.0
2017 40.9 29.6 24.8 33. 2018 41.1 29.7 24.9 34. 2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.7 23.8 23.8 23.9 23.9	20.3 20.4 20.4 20.4	26.9 27.0				41.5	10.7	24.0	45.9	42.9	48.8
2018 41.1 29.7 24.9 34. 2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.8 23.8 23.9 23.9	20.4 20.4 20.4	27.0				21.5	18.8	24.2	46.0	43.0	49.0
2019 41.3 29.9 25.0 34. 2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.8 23.9 23.9	20.4 20.4					21.7	19.0	24.4	46.3	43.2	49.3
2020 41.5 30.0 25.0 34. 2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.9 23.9	20.4	27.0				21.9	19.2	24.6	46.5	43.4	49.5
2021 41.7 30.1 25.1 34. 2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.	23.9						22.1	19.4	24.8	46.7	43.6	49.8
2022 41.9 30.3 25.2 34. 2023 42.1 30.4 25.3 34.		20 =	27.1				22.3	19.6	25.0	46.9	43.8	50.0
2023 42.1 30.4 25.3 34.	24.0	20.5	27.2				22.5	19.7	25.2	47.1	43.9	50.3
		20.5	27.3				22.7	19.9	25.4	47.4	44.1	50.6
	24.0	20.5	27.3				22.9	20.1	25.6	47.6	44.3	50.9
2024 43.3 30.9 25.1 36.	23.1	19.0	27.1				23.5	19.9	27.1	49.8	45.2	54.4
2025 43.6 31.1 25.2 36.	23.2	19.0	27.2				23.9	20.3	27.5	50.1	45.5	54.8
2026 44.0 31.3 25.3 36.	23.3	19.1	27.3				24.2	20.6	27.9	50.5	45.8	55.3
2027 44.3 31.5 25.4 36.	23.4	19.2	27.5				24.6	20.9	28.3	50.9	46.2	55.8
2028 44.7 31.7 25.5 37.	23.5	19.3	27.6				24.9	21.2	28.7	51.4	46.5	56.3
2029 45.0 31.9 25.6 37.	23.6	19.4	27.7				25.3	21.5	29.1	51.8	46.9	56.3
2030 45.4 32.2 25.8 37.	23.7	19.4	27.8				25.6	21.8	29.4	52.2	47.2	57.3
2031 45.7 32.4 25.9 38.	23.8	19.5	28.0				26.0	22.1	29.8	52.6	47.5	57.7
2032 46.1 32.6 26.0 38.	23.9	19.6	28.1				26.4	22.4	30.2	53.0	47.9	58.2
2033 46.4 32.8 26.1 38.	24.0	19.7	28.2				26.7	22.7	30.6	53.4	48.2	58.6
2034 47.5 33.0 25.9 39.	23.3	19.1	27.5				27.3	22.9	31.7	55.2	49.2	61.4
2035 48.0 33.3 26.0 39.	23.4	19.3	27.6				27.8	23.3	32.3	55.8	49.7	
2036 48.5 33.6 26.2 40.	23.6	19.4	27.8				28.3	23.7	32.8	56.3	50.2	
2037 49.0 33.8 26.3 40.	23.7	19.5	28.0				28.8	24.1	33.3	56.9	50.6	
2038 49.4 34.1 26.5 41.	23.8	19.6	28.2				29.3	24.6	33.9	57.4	51.1	
2039 49.9 34.4 26.7 41.	24.0	19.7	28.3				29.8	25.0	34.4	57.9	51.5	
2040 50.4 34.7 26.8 41.	24.1	19.8	28.5				30.2	25.4	34.9	58.5	52.0	
2041 50.8 35.0 27.0 42.	24.3	20.0	28.7				30.7	25.8	35.4	59.0	52.4	
2042 51.3 35.4 27.2 42.	24.4	20.1	28.9				31.2	26.2	35.9	59.6	52.9	
2043 51.8 35.7 27.3 43.	24.5	20.2	29.0				31.7	26.6	36.5		53.3	
2044 52.1 35.3 26.7 42.	23.8	20.0	27.8				32.3	27.0	37.3		53.5	
2045 52.8 35.6 26.9 43.	24.0	20.1	28.0				32.9	27.5	38.0		54.1	
2046 53.4 36.0 27.1 44.	24.1	20.3	28.2				33.5	28.0	38.6		54.7	
2047 54.0 36.4 27.3 44.	24.3	20.4	28.5				34.1	28.6	39.3		55.4	
2048 54.6 36.8 27.5 45.	24.5	20.5	28.7				34.7	29.1	39.9		56.0	
2049 55.3 37.2 27.7 45.	24.7	20.7	28.9				35.3	29.6	40.6		56.6	
2050 55.9 37.6 27.9 46.	24.8	20.9	29.1				35.9	30.1	41.3		57.3	
2051 56.5 38.0 28.1 46.	25.0	21.0	29.3				36.5	30.6	41.9		57.9	
2052 57.2 38.4 28.4 47.	25.2	21.2	29.6				37.2	31.1	42.6		58.5	
2053 57.8 38.8 28.6 48.	25.4	21.3	29.8				37.8	31.7	43.3		59.2	
2054 58.5 39.2 28.8 48.	25.6	21.5	30.0				38.4	32.2	43.9		59.8	
2055 59.1 39.6 29.0 49.	25.8	21.7	30.3				39.0	32.7	44.6			
2056 59.8 40.1 29.2 49.	26.0	21.8	30.5				39.6	33.2	45.3			
2057 40.5 29.5 50.	26.2	22.0	30.7				40.3	33.8	46.0			
2058 40.9 29.7 51.	26.4	22.2	31.0				40.9	34.3	46.7			
2059 41.4 29.9 51.	26.6	22.3	31.2				41.5	34.9	47.4			
2060 41.8 30.1 52.	26.8	22.5	31.5				42.2	35.4	48.1			

Note. The data for races exclude Hispanic, and race combination is not included. See Appendix B for full methodology. Data are from U.S. Census Bureau 2020. Population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2013, IPUMS Online Tabulator, https://usa.ipums.org/usa/. The year 2025 is shaded gray to highlight the target year of the goal set forth by Lumina Foundation. Annual rates that round up to or exceed 60% attainment are also shaded to highlight groups that have or are projected to reach the goal in the 2014–2060 timeline.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–64. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–64. Does not include other race, not elsewhere categorized, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–64. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population ages 25–64.

Table C3 Projected Year of 60% Certificate or Associate's or Bachelor's Degree Goal Attainment by Race and Gender, Ages 25–64 (Using Rates Observed From 2006 to 2014)

		Afric	an Ameri	can ^a (%)	Н	ispanic ^b (%)		White ^c (%	5)
	U.S. population	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women
2014	45.3	34.8	31.5	37.7	27.2	24.7	29.7	50.3	48.0	52.5
2015	45.5	34.9	31.5	37.8	27.4	24.9	29.9	50.4	48.2	52.7
2016	45.7	35.0	31.6	38.0	27.6	25.0	30.1	50.6	48.3	52.9
2017	45.8	35.1	31.6	38.1	27.7	25.2	30.3	50.8	48.5	53.2
2018	46.0	35.3	31.7	38.3	27.9	25.4	30.5	51.0	48.7	53.4
2019	46.2	35.4	31.8	38.5	28.1	25.6	30.7	51.3	48.9	53.7
2020	46.4	35.5	31.8	38.6	28.3	25.8	30.9	51.5	49.1	53.9
2021	46.6	35.7	31.9	38.8	28.5	25.9	31.1	51.7	49.2	54.2
2022	46.8	35.8	32.0	39.0	28.7	26.1	31.3	51.9	49.4	54.5
2023	47.0	35.9	32.1	39.2	28.9	26.3	31.5	52.2	49.6	54.8
2024	48.2	36.4	31.9	40.3	29.6	26.1	33.0	54.3	50.5	58.3
2025	48.5	36.6	32.0	40.6	29.9	26.5	33.4	54.7	50.8	58.7
2026	48.9	36.8	32.1	40.9	30.3	26.8	33.8	55.1	51.1	59.2
2027	49.2	37.0	32.2	41.2	30.6	27.1	34.2	55.5	51.5	59.7
2028	49.6	37.2	32.3	41.5	31.0	27.4	34.6	55.9	51.8	0,11
2029	49.9	37.5	32.4	41.8	31.3	27.7	35.0	56.4	52.2	
2030	50.3	37.7	32.6	42.2	31.7	28.0	35.3	56.8	52.5	
2031	50.6	37.9	32.7	42.5	32.0	28.3	35.7	57.2	52.8	
2032	51.0	38.1	32.8	42.8	32.4	28.6	36.1	57.6	53.2	
2032	51.3	38.4	32.9	43.1	32.4	28.9	36.5	57.9	53.5	
2034	52.4	38.5	32.7	43.6	33.4	29.1	37.6	59.8	54.5	
2035	52.9	38.8	32.8	44.0	33.9	29.5	38.2	37.0	55.0	
2036	53.4	39.1	33.0	44.5	34.4	29.9	38.7		55.5	
2037	53.9	39.4	33.1	44.9	34.8	30.3	39.2		55.9	
2038	54.3	39.7	33.3	45.3	35.3	30.8	39.8		56.4	
2039	54.8	40.0	33.5	45.7	35.8	31.2	40.3		56.8	
2039	55.3	40.0	33.6	46.2	36.3	31.6	40.3		57.3	
2040	55.7	40.5	33.8	46.6	36.8	32.0	41.3		57.3 57.7	
2041									58.2	
2042	56.2 56.7	40.9 41.2	34.0 34.1	47.0 47.4	37.2 37.7	32.4 32.8	41.8 42.4		58.6	
2043	57.0	40.8	33.5	47.4	38.3	33.2	43.2		58.8	
2044	57.7	41.2	33.7	47.2	38.9	33.7	43.2		50.6 59.4	
2045	58.3	41.5	33.9	48.3	39.5	34.2	44.5		60.0	
2046	58.9	41.5	33.9		39.3 40.1	34.2 34.8			0.00	
				48.9			45.2			
2048	59.5	42.3	34.3	49.5	40.8	35.3	45.8			
2049		42.7	34.5	50.0	41.4	35.8	46.5			
2050		43.1	34.7	50.6	42.0	36.3	47.2			
2051		43.5	34.9	51.2	42.6	36.8	47.8			
2052		43.9	35.2	51.8	43.2	37.3	48.5			
2053		44.3	35.4	52.4	43.8	37.9	49.2			
2054		44.7	35.6	53.0	44.4	38.4	49.8			
2055		45.2	35.8	53.6	45.1	38.9	50.5			
2056		45.6	36.0	54.2	45.7	39.4	51.2			
2057		46.0	36.3	54.8	46.3	40.0	51.9			
2058		46.5	36.5	55.4	46.9	40.5	52.6			
2059		46.9	36.7	56.0	47.6	41.1	53.3			
2060		47.3	36.9	56.6	48.2	41.6	54.0			

Note. See Appendix B for full methodology. The data for races exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2020 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/; NORC, unpublished estimates from the National Education and Employment Study. The year 2025 is shaded gray to highlight the target year of the goal set forth by Lumina Foundation. Annual rates that round up to or exceed 60% attainment are also shaded to highlight groups that have or are projected to reach the goal in the 2014–2060 timeline.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race not elsewhere categorized, population ages 25–64. Does not include two major races; three or more races. ^cIncludes all White non-Hispanic population ages 25–64.

Appendix D: 1990-2014 Time Horizon—Projections

Category A: Current status of population relative to degree attainment goals

- 1. U.S. population ages 25 34 in 2014
- 2. U.S. population ages 25-34 with associate's and/or bachelor's degree in 2014
- 3. Percentage of U.S. population ages 25-34 with associate's or bachelor's degree in 2014

Category B: Projected progress toward achieving degree attainment goals by 2020 (Table 1) and 2025 (Table 3)

- 4. Projected U.S. population ages 25 34 in 2020
- 5. Projected U.S. population ages 25-34 with associate's or bachelor's degree in 2020^{\dagger}
- 6. Projected percentage of U.S. population ages 25 34 with associate's or bachelor's degrees in 2020
- 7. Projected percentage of 60% goal attained by 2020 based on present annual rate of increase from 2014
- 8. Projected annual increase in population ages 25-34 between 2014 and 2020
- 9. Projected annual increase in population ages 25 34 with associate's or bachelor's degree from 2014 to 2020
- 10. Projected average annual rate of change in population ages 25 34 from 2014 to 2020
- 11. Projected average annual change in rate of associate's or bachelor's degree attainment from 2014 to 2020
- 12. Ratio of projected average annual rate of change in degree totals to average annual rate of change in population from 2014 to 2020

Category C: Effort required to achieve degree attainment goals by 2020 and 2025 and beyond

- 13. Projected degrees required among U.S. population ages 25 34 to be at roughly 60% in 2020
- 14. Additional associate's or bachelor's degrees beyond projected number among U.S. population ages 25 34 required to reach 60% attainment by 2020
- 15. Estimated additional associate's or bachelor's degrees needed above the number in 2014 for U.S. population ages 25 34 to reach 60% by 2020
- 16. Percentage increase required from current year (2014) associate's or bachelor's degrees to reach 60% by 2020 among U.S. population ages 25–34
- 17. Average annual change in rate of degree attainment required from 2014 for U.S. population ages 25–34 to reach 60% attainment (2014–2020)
- 18. Estimated additional percentage increase in degree attainment needed beyond the year 2020 to reach 60% attainment

Estimated Number of Associate's and Bachelor's Degrees Needed to Reach the 60% Attainment Goal by 2020: Ages 25–34

Table D1 Current Population and Degree Attainment Status, Ages 25-34

Group	U.S. population in 2014	U.S. population with associate's or bachelor's degree in 2014	Percentage of U.S. population with associate's or bachelor's degree in 2014
U.S. population	43,279,253	18,303,530	42.3
African American ^a	5,665,337	1,641,948	29.0
Men	2,705,664	632,967	23.4
Women	2,959,673	1,008,981	34.1
American Indian/Alaska Nativeb	285,226	59,806	21.0
Men	141,407	24,770	17.5
Women	143,735	35,036	24.4
Asian ^c	2,875,013	1,967,630	68.4
Men	1,364,706	903,830	66.2
Women	1,510,307	1,063,800	70.4
Hispanic ^d	8,448,047	1,850,721	21.9
Men	4,423,827	803,988	18.2
Women	4,024,220	1,046,733	26.0
White ^e	24,638,335	12,217,260	49.6
Men	12,466,227	5,513,330	44.2
Women	12,172,108	6,703,930	55.1

Note. See Appendix B for full methodology. The data for races exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2020 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Table D2 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2020, Ages 25-34

Ratio of projected average annual rate of change in degree totals to average annual rate of change in population from 2014 to 2020	1.9:1	1.6:1	1.4:1	1.9:1	1.3:1			1.2:1	1.4:1	1.5:1	1.3:1	1.7:1	1.5:1	1.3:1	1.7:1	4.0:1	2.9:1	5.5:1
Projected annual rate of growth in degree totals, 2014–2025 (%)	2.2	3.8	4.4	3.3	6.1			6.4	5.8	3.2	3.5	2.9	3.7	3.7	3.7	1.5	1.3	1.6
Projected average annual change in rate of associate's or bachelor's degree attainment from 2014 to 2020 (%)	0.47	0.42	0.28	0.54	0.26			0.18	0.34	0.71	0.54	98.0	0.26	0.15	0.38	0.63	0.44	0.82
Projected average annual rate of change in population from 2014 to 2020 (%)	1.4	2.8	3.7	2.0	5.5			6.1	5.0	2.5	3.1	2.0	2.9	3.3	2.6	0.4	0.5	0.3
Projected annual increase in population with associate's or bachelor's degrees, 2014–2020 (%)	472,678	73,565	32,468	38,357	4,290			1,854	2,374	73,081	37,063	35,561	80,641	34,462	44,815	211,885	85,669	124,700
Projected annual increase in population between 2014 and 2020 (%)	601,781	158,778	866,86	59,780	15,789			8,654	7,149	72,552	42,725	29,827	248,533	144,761	103,772	108,169	66,748	41,421
Projected 60% goal attained by 2020 based on present annual rate of increase from 2014 (%)	75.1	52.5	41.8	62.2	37.5			30.9	44.0	121.1	115.8	126.0	39.1	31.8	47.2	88.9	78.1	100.0
Projected U.S. population with associate's or bachelor's degrees in 2020 (%)	45.1	31.5	25.1	37.3	22.5			18.6	26.4	72.7	69.5	75.6	23.5	19.1	28.3	53.3	46.8	0.09
Projected U.S. population with associate's or bachelor's degree in 2020	21,139,600	2,083,336	827,778	1,239,121	85,546			35,895	49,281	2,406,116	1,126,209	1,277,166	2,334,566	1,010,757	1,315,621	13,488,568	6,027,346	7,452,130
Projected U.S. population in 2020	46,889,936	6,618,002	3,299,651	3,318,351	379,957			193,330	186,627	3,310,325	1,621,058	1,689,267	9,939,246	5,292,394	4,646,852	25,287,348	12,866,714	12,420,634
Group	U.S. population	African American ^a	Men	Women	American	Indian/Alaska	Native ^b	Men	Women	Asian ^c	Men	Women	Hispanic ^d	Men	Women	White	Men	Women

Asian or Pacific Islander population ages 25-34. Does not include other race, not elsewhere categorized, two major races, three or more major races. dIncludes White, Black, AIAN, Includes all Black non-Hispanic population ages 25–34. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. cIncludes Chinese, Japanese, other Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-34. Does not include two major races; three or more races. "Includes all White non-Hispanic population ages 25-34.

Table D3 Effort Required to Achieve Degree Attainment Goal, Ages 25-34

Group	Projected degrees required among U.S. population to be at roughly 60% in 2020	Additional associate's or bachelor's degrees beyond projected number among U.S. populatio n required to reach 60% attainment by 2020	Estimated additional associate's or bachelor's degrees needed above the number in 2014 for U.S. population to reach 60% by 2020	Percentage increase required from current year (2015) associate's or bachelor's degrees to reach 60% by 2020 among U.S. population	Average annual change in rate of degree attainment required from 2014 for U.S. population to reach 60% attainment (2014 – 2020) (%)	Estimated additional percentage increase in degree attainment needed beyond the year 2020 to reach 60% attainment
U.S. population	28,133,962	6,994,361	9,830,432	53.7	3.0	33.1
African American ^a	3,970,801	1,887,465	2,328,853	141.8	5.2	90.6
Men	1,979,791	1,152,013	1,346,824	212.8	6.1	139.2
Women	1,991,011	751,889	982,030	97.3	4.3	60.7
American	227,974	142,428	168,168	281.2	6.5	166.5
Indian/Alaska						
Native ^b						
Men	115,998	80,103	91,228	368.3	7.1	223.2
Women	111,976	62,695	76,940	219.6	5.9	127.2
Asian ^c	1,986,195	d	d	d	d	d
Men	972,635	d	d	d	d	d
Women	1,013,560	d	d	d	d	d
Hispanic ^e	5,963,548	3,628,982	4,112,827	222.2	6.3	155.4
Men	3,175,436	2,164,679	2,371,448	295.0	7.0	214.2
Women	2,788,111	1,472,491	1,741,378	166.4	5.7	111.9
White ^f	15,172,409	1,683,841	2,955,149	24.2	1.7	12.5
Men	7,720,028	1,692,682	2,206,698	40.0	2.6	28.1
Women	7,452,380	250	748,450	11.2	0.8	0.0

Table D4 Projected Year of 60% of Associate's or Bachelor's Degree Goal Attainment by Race and Gender, Ages 25 – 34 (Based on Rates Observed From 1990 to 2014)

	U.S.	Afri Ame	can erican	a (%)	Amer Alask		ndian/ ve ^b (%)	As	sian ^c (%)	His	panic	1 (%)	W	hite ^e ((%)
	population	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women
2014	42.3	29.0	23.4	34.1	21.0	17.5	24.4	68.4	66.2	70.4	21.9	18.2	26.0	49.6	44.2	55.1
2015	42.8	29.4	23.7	34.6	21.2	17.7	24.7				22.2	18.3	26.4	50.2	44.7	55.9
2016	43.2	29.8	24.0	35.2	21.5	17.9	25.1				22.4	18.5	26.8	50.8	45.1	56.7
2017	43.7	30.2	24.2	35.7	21.7	18.0	25.4				22.7	18.6	27.2	51.5	45.5	57.5
2018	44.2	30.6	24.5	36.3	22.0	18.2	25.7				23.0	18.8	27.5	52.1	46.0	58.4
2019	44.6	31.1	24.8	36.8	22.3	18.4	26.1				23.2	18.9	27.9	52.7	46.4	59.2
2020		31.5	25.1	37.3	22.5	18.6	26.4				23.5	19.1	28.3	53.3	46.8	60.0
2021	45.5	31.9	25.4	37.9	22.8	18.7	26.7				23.8	19.3	28.7	54.0	47.3	
2022	46.0	32.3	25.7	38.4	23.0	18.9	27.1				24.0	19.4	29.1	54.6	47.7	
2023	46.5	32.7	25.9	39.0	23.3	19.1	27.4				24.3	19.6	29.5	55.2	48.2	
2024	46.9	33.1	26.2	39.5	23.5	19.3	27.8				24.5	19.7	29.8	55.8	48.6	
2025	47.4	33.6	26.5	40.1	23.8	19.4	28.1				24.8	19.9	30.2	56.5	49.0	
2026	47.9	34.0	26.8	40.6	24.1	19.6	28.4				25.1	20.0	30.6	57.1	49.5	
2027	48.3	34.4	27.1	41.1	24.3	19.8	28.8				25.3	20.2	31.0	57.7	49.9	
2028	48.8	34.8	27.3	41.7	24.6	20.0	29.1				25.6	20.3	31.4	58.3	50.3	
2029	49.3	35.2	27.6	42.2	24.8	20.1	29.5				25.9	20.5	31.8	59.0	50.8	
2030	49.7	35.6	27.9	42.8	25.1	20.3	29.8				26.1	20.6	32.1	59.6	51.2	
2031	50.2	36.1	28.2	43.3	25.4	20.5	30.1				26.4	20.8	32.5		51.6	
2032	50.7	36.5	28.5	43.8	25.6	20.7	30.5				26.7	20.9	32.9		52.1	
2033	51.1	36.9	28.8	44.4	25.9	20.8	30.8				26.9	21.1	33.3		52.5	
2034	51.6	37.3	29.0	44.9	26.1	21.0	31.1				27.2	21.3	33.7		53.0	
2035	52.1	37.7	29.3	45.5	26.4	21.2	31.5				27.4	21.4	34.1		53.4	
2036	52.5	38.1	29.6	46.0	26.6	21.4	31.8				27.7	21.6	34.4		53.8	
2037	53.0	38.6	29.9	46.6	26.9	21.5	32.2				28.0	21.7	34.8		54.3	
2038	53.5	39.0	30.2	47.1	27.2	21.7	32.5				28.2	21.9	35.2		54.7	
2039	53.9	39.4	30.4	47.6	27.4	21.9	32.8				28.5	22.0	35.6		55.1	
2040	54.4	39.8	30.7	48.2	27.7	22.1	33.2				28.8	22.2	36.0		55.6	
2041	54.9	40.2	31.0	48.7	27.9	22.2	33.5				29.0	22.3	36.4		56.0	
2042	55.3	40.6	31.3	49.3	28.2	22.4	33.9				29.3	22.5	36.8		56.4	
2043	55.8	41.1	31.6	49.8	28.4	22.6	34.2				29.5	22.6	37.1		56.9	
2044	56.3	41.5	31.9	50.3	28.7	22.8	34.5				29.8	22.8	37.5		57.3	
2045	56.7	41.9	32.1	50.9	29.0	22.9	34.9				30.1	22.9	37.9		57.8	
2046	57.2	42.3	32.4	51.4	29.2	23.1	35.2				30.3	23.1	38.3		58.2	
2047	57.6	42.7	32.7	52.0	29.5	23.3	35.5				30.6	23.3	38.7		58.6	
2048 2049	58.1 58.6	43.1	33.0 33.3	52.5 53.1	29.7 30.0	23.5 23.6	35.9 36.2				30.9 31.1	23.4 23.6	39.1 39.4		59.1 59.5	
2049	59.0	43.6											39.4		59.9	
	59.5	44.0	33.6	53.6	30.2	23.8	36.6				31.4	23.7			39.9	
2051 2052	39.3	44.4 44.8	33.8 34.1	54.1 54.7	30.5 30.8	24.0 24.2	36.9 37.2				31.7 31.9	23.9 24.0	40.2 40.6			
2052		44.8	34.1	55.2	31.0	24.2	37.2				32.2	24.0	41.0			
2053		45.6	34.4	55.2 55.8	31.3	24.5	37.6				32.4	24.2	41.0			
2055		46.0	35.0	56.3	31.5	24.7	38.3				32.4	24.5	41.7			
2056		46.5	35.2	56.8	31.8	24.7	38.6				33.0	24.6	42.1			
2057		46.9	35.5	57.4	32.1	25.0	38.9				33.2	24.8	42.1			
2058		47.3	35.8	57.4 57.9	32.1	25.2	39.3				33.5	25.0	42.3			
2059		47.7	36.1	58.5	32.6	25.4	39.6				33.8	25.1	43.3			
2060		48.1	36.4	59.0		25.4					34.0	25.3	43.7			
2060		48.1	36.4	59.0	32.8	25.6	39.9				54.0	25.3	43./			

Note. See Appendix B for full methodology. The data for races exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2020 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/. The year 2020 is shaded gray to highlight the target year of the goal set forth by President Obama. Annual rates that round up to or exceed 60% attainment are also shaded to highlight groups that have or are projected to reach the goal in the 2014–2060 timeline.

^aIncludes all Black non-Hispanic population ages 25–34. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–34. Does not include other race, not elsewhere categorized, two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–34. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population ages 25–34.

Table D5 Current Population and Degree Attainment Status, Ages 25-64

Group	U.S. population in 2014	U.S. population with associate's or bachelor's degree in 2014	Percentage of U.S. population with associate's or bachelor's degree in 2014
U.S. population	167,593,630	67,741,740	40.4
African American ^a	20,625,035	6,045,661	29.3
Men	9,677,566	2,391,462	24.7
Women	10,947,469	3,654,199	33.4
American Indian/Alaska Nativeb	1,085,821	256,707	23.6
Men	526,029	106,434	20.2
Women	559,792	150,273	26.8
Asian ^c	9,915,284	6,025,788	60.8
Men	4,614,565	2,824,398	61.2
Women	5,300,719	3,201,390	60.4
Hispanic ^d	26,294,580	5,550,903	21.1
Men	13,360,946	2,467,322	18.5
Women	12,933,634	3,083,581	23.8
White ^e	105,869,394	48,371,917	45.7
Men	52,737,247	22,530,188	42.7
Women	53,132,147	25,841,729	48.6

Table D6 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2025, Ages 25-64

	Projected U.S.	Projected U.S. population Projected U.S. with associate's	Projected percentage of U.S. population with associate's	Projected percentage of 60% goal attained by 2025 based on present	Projected annual increase in population	Projected annual increase in population with associate's or bachelor's	Projected average annual rate of change in population	Projected average annual rate of change in associate's or bachelor's	katto ot projected average annual rate of change in degree totals to average annual rate of change in population
Group	population in 2025	or bachelor's degree, 2025	or bachelor's degree in 2025	annual rate of increase from 2014	between 2014 to 2025	degree, 2014–2025	from 2014 to 2025 (%)	degrees from 2014 to 2025 (%)	from 2014 to 2025 (%)
U.S. population	175,664,097	75,639,954	43.1	71.8	733,679	718,019	0.4	0.2	2.4:1
African American ^a	22,668,934	7,051,731	31.1	51.8	185,809	91,461	6.0	0.2	1.7:1
Men	10,891,881	2,769,501	25.4	42.4	110,392	34,367	1.1	0.1	1.3:1
Women	11,777,053	4,262,772	36.2	60.3	75,417	55,325	0.7	0.3	2.2:1
American	1,286,130	301,265	23.4	39.0	18,210	4,051	1.7	0.0	0.9:1
Indian/Alaska									
Native ^b									
Men	636,614	121,575	19.1	31.8	10,053	1,376	1.9	-0.1	0.7:1
Women	649,516	179,235	27.6	46.0	8,157	2,633	1.5	0.1	1.2:1
Asian ^c	12,701,787	8,613,138	67.8	113.0	253,318	235,214	2.6	9.0	1.5:1
Men	6,008,647	3,993,330	66.5	110.8	126,735	106,267	2.7	0.5	1.4:1
Women	6,693,140	4,615,636	0.69	114.9	126,584	128,568	2.4	0.8	1.7:1
Hispanic ^d	35,193,968	7,914,172	22.5	37.5	809,035	214,843	3.1	0.1	1.3:1
Men	18,287,515	3,438,668	18.8	31.3	447,870	88,304	3.4	0.0	1.1:1
Women	16,906,453	4,463,364	26.4	44.0	361,165	125,435	2.8	0.2	1.5:1
$White^e$	99,666,658	49,566,856	49.7	82.9	ч	108,631	-0.5	0.4	-0.4:1
Men	49,970,287	22,430,886	44.9	74.8	Į.	-9,027	-0.5	0.2	0.1:1
Women	49,696,371	27,137,855	54.6	91.0	Ţ	117,830	9.0-	0.5	-0.8:1

AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-64. Does not include two major races, three or more races. *Includes all White non-Hispanic *Includes all Black non-Hispanic population ages 25–64. Includes all American Indians and Alaska Natives non-Hispanic population ages 25–64. Includes Chinese, Japanese, other Asian or Pacific Islander population ages 25-64. Does not include other race, not elsewhere categorized (nec), two major races, three or more major races. ^dIncludes White, Black, population ages 25-64. ^fGroup has or will have met 60% by 2020, calculation not applicable.

Table D7 Effort Required to Achieve Degree Attainment Goal, Ages 25-64

Group	Projected degrees required among U.S. population to be at roughly 60% in 2025	required to reach 60%	needed above the	Percentage increase required from current year (2015) associate's or bachelor's degrees to reach 60% by 2025 among U.S. population	Average annual change in rate of degree attainment required from 2014 for U.S. population to reach 60% attainment, 2014 – 2025 (%)	Estimated additional percentage increase in degree attainment needed beyond the year 2025 to reach 60% attainment
U.S. population	105,398,458	29,758,504	37,656,718	55.6	1.8	39.3
African American ^a	13,601,360	6,549,629	7,555,699	125.0	2.8	92.9
Men	6,535,129	3,765,628	4,143,667	173.3	3.2	136.0
Women	7,066,232	2,803,459	3,412,033	93.4	2.4	65.8
American Indian/Alaska Native ^b	771,678	470,413	514,971	200.6	3.3	156.1
Men	381,968	260,394	275,534	258.9	3.6	214.2
Women	389,710	210,475	239,437	159.3	3.0	117.4
Asian ^c	7,621,072	d	1,595,284	26.5	d	d
Men	3,605,188	d	780,790	27.6	d	d
Women	4,015,884	d	814,494	25.4	d	d
Hispanic ^e	21,116,381	13,202,209	15,565,478	280.4	3.5	166.8
Men	10,972,509	7,533,841	8,505,187	344.7	3.8	219.1
Women	10,143,872	5,680,508	7,060,291	229.0	3.3	127.3
White ^f	59,799,995	10,233,139	11,428,078	23.6	1.3	20.6
Men	29,982,172	7,551,286	7,451,984	33.1	1.6	33.7
Women	29,817,823	2,679,968	3,976,094	15.4	1.0	9.9

Table D8 Projected Year of 60% Associate's or Bachelor's Degree Goal Attainment by Race and Gender, Ages 25–64 (Based on Rates Observed From 1990 to 2014)

	U.S.	Afri Ame	can erican'	¹ (%)	Ameri Alaska		ndian/ ve ^b (%)	As	sian ^c ((%)	His	panic	1 (%)	W	hite ^e ((%)
	population	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women	Overall	Men	Women
2014	40.4	29.3	24.7	33.4	23.6	20.2	26.8	60.8	61.2	60.4	21.1	18.5	23.8	45.7	42.7	48.6
2015	40.5	29.4	24.8	33.5	23.6	20.2	26.8				21.2	18.5	23.9	45.8	42.8	48.8
2016	40.7	29.5	24.8	33.6	23.7	20.3	26.9				21.3	18.6	24.0	46.0	42.9	49.0
2017	40.8	29.6	24.9	33.8	23.8	20.3	27.0				21.3	18.6	24.1	46.2	43.1	49.2
2018	40.9	29.7	25.0	33.9	23.8	20.4	27.1				21.4	18.7	24.2	46.3	43.2	49.5
2019	41.1	29.9	25.1	34.1	23.9	20.4	27.2				21.5	18.7	24.3	46.5	43.3	49.7
2020	41.2	30.0	25.2	34.3	24.0	20.5	27.3				21.6	18.8	24.4	46.7	43.4	49.9
2021	41.4	30.2	25.3	34.4	24.1	20.5	27.4				21.7	18.9	24.5	46.9	43.6	50.2
2022	41.5	30.3	25.4	34.6	24.1	20.5	27.5				21.7	18.9	24.6	47.1	43.7	50.5
2023	41.7	30.4	25.5	34.8	24.2	20.6	27.6				21.8	19.0	24.7	47.3	43.8	50.7
2024	42.8	30.9	25.3	35.9	23.3	19.0	27.4				22.3	18.7	26.2	49.4	44.7	54.2
2025	43.1	31.1	25.4	36.2	23.4	19.1	27.6				22.5	18.8	26.4	49.7	44.9	54.6
2026	43.3	31.3	25.6	36.5	23.6	19.2	27.8				22.6	18.9	26.6	50.1	45.1	55.0
2027	43.6	31.5	25.7	36.7	23.7	19.3	27.9				22.8	19.0	26.8	50.4	45.3	55.5
2028	43.8	31.7	25.9	37.0	23.8	19.4	28.1				22.9	19.1	27.0	50.7	45.6	55.9
2029	44.1	32.0	26.0	37.3	24.0	19.4	28.3				23.1	19.2	27.2	51.1	45.8	56.4
2030	44.3	32.2	26.2	37.6	24.1	19.5	28.5				23.2	19.2	27.4	51.4	46.1	56.9
2031	44.6	32.4	26.3	37.9	24.2	19.6	28.7				23.4	19.3	27.7	51.8	46.3	57.3
2032	44.8	32.7	26.5	38.2	24.4	19.7	28.9				23.5	19.4	27.9	52.1	46.5	57.7
2033	45.1	32.9	26.7	38.5	24.5	19.8	29.1				23.7	19.5	28.1	52.4	46.8	58.1
2034	46.1	33.0	26.4	39.0	23.9	19.3	28.4				24.1	19.5	29.0	54.2	47.7	60.8
2035	46.4	33.3	26.6	39.4	24.0	19.4	28.6				24.3	19.6	29.3	54.7	48.0	
2036	46.8	33.6	26.8	39.8	24.2	19.5	28.9				24.5	19.7	29.6	55.1	48.4	
2037	47.1	33.9	27.1	40.1	24.4	19.6	29.1				24.7	19.8	29.9	55.6	48.7	
2038	47.5	34.2	27.3	40.5	24.6	19.8	29.4				24.9	19.9	30.2	56.0	49.0	
2039	47.8	34.5	27.5	40.9	24.8	19.9	29.6				25.1	20.1	30.5	56.4	49.3	
2040	48.1	34.8	27.7	41.3	25.0	20.0	29.9				25.3	20.2	30.8	56.9	49.6	
2041	48.5	35.1	27.9	41.7	25.2	20.1	30.1				25.4	20.3	31.0	57.3	49.9	
2042	48.8	35.5	28.1	42.1	25.4	20.3	30.4				25.6	20.4	31.3	57.8	50.2	
2043	49.2	35.8	28.3	42.5	25.5	20.4	30.6				25.8	20.5	31.6	58.2	50.5	
2044	49.4	35.4	27.8	42.3	24.9	20.2	29.5				26.2	20.7	32.2	58.6	50.6	
2045	49.8	35.8	28.0	42.8	25.1	20.3	29.8				26.4	20.8	32.6	59.2	51.0	
2046	50.3	36.1	28.3	43.3	25.3	20.5	30.1				26.7	21.0	32.9	59.8	51.4	
2047	50.7	36.5	28.6	43.8	25.5	20.6	30.4				26.9	21.1	33.3		51.8	
2048	51.2	36.9	28.8	44.4	25.8	20.8	30.7				27.2	21.3	33.7		52.3	
2049	51.7	37.3	29.1	44.9	26.0	21.0	31.0				27.4	21.4	34.0		52.7	
2050	52.1	37.7	29.4	45.4	26.3	21.1	31.4				27.7	21.6	34.4		53.1	
2051	52.6	38.1	29.6	46.0	26.5	21.3	31.7				27.9	21.7	34.8		53.6	
2052	53.0	38.6	29.9	46.5	26.8	21.5	32.0				28.2	21.9	35.1		54.0	
2053	53.5	39.0	30.2	47.0	27.0	21.6	32.4				28.4	22.0	35.5		54.4	
2054	54.0	39.4	30.5	47.6	27.3	21.8	32.7				28.7	22.1	35.9		54.9	
2055	54.4	39.8	30.8	48.2	27.6	22.0	33.1				28.9	22.3	36.2		55.3	
2056	54.9	40.3	31.1	48.7	27.8	22.2	33.4				29.2	22.4	36.6		55.8	
2057	55.4	40.7	31.4	49.3	28.1	22.4	33.8				29.5	22.6	37.0		56.2	
2058	55.9	41.1	31.7	49.9	28.4	22.6	34.1				29.7	22.8	37.4		56.6	
2059	56.3	41.6	32.0	50.4	28.6	22.7	34.5				30.0	22.9	37.7		57.1	
2060	56.8	42.0	32.2	51.0	28.9	22.9	34.8				30.2	23.1	38.1		57.5	

Note. See Appendix B for full methodology. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/. The year 2025 is shaded gray to highlight the target year of the goal set forth by Lumina Foundation. Annual rates that round up to or exceed 60% attainment are also shaded to highlight groups that have or are projected to reach the goal in the 2014–2060 timeline.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–64. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25–64. Does not include other race, not elsewhere categorized (nec), two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25–64. Does not include two major races; three or more races. ^eIncludes all White non-Hispanic population ages 25–64.

Appendix E: Detailed Projection Tables (7, 8, 9) With Expanded Data Elements

Table E1 Current Population and Degree Attainment Status, Ages 25-34

Group	U.S. population in 2014	U.S. population with associate's and/or bachelor's degree in 2014	Percentage of U.S. population with associate's or bachelor's degree in 2014
U.S. population	43,279,253	18,303,530	42.3
African American ^a	5,665,337	1,641,948	29.0
Men	2,705,664	632,967	23.4
Women	2,959,673	1,008,981	34.1
American Indian/Alaska Nativeb	285,226	59,806	21.0
Men	141,407	24,770	17.5
Women	143,735	35,036	24.4
Asian ^c	2,875,013	1,967,630	68.4
Men	1,364,706	903,830	66.2
Women	1,510,307	1,063,800	70.4
Hispanic ^d	8,448,047	1,850,721	21.9
Men	4,423,827	803,988	18.2
Women	4,024,220	1,046,733	26.0
White ^e	24,638,335	12,217,260	49.6
Men	12,466,227	5,513,330	44.2
Women	12,172,108	6,703,930	55.1

Note. See Appendix B for full methodology. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Table E2 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2020, Ages 25-34

								Droiord		Ratio of
								110)000		projecta
								average		annual
			Projected	Projected		Projected		annual		average
				percentage of		annual	Projected	change in		change in
		Projected U.S.	of U.S.	60% goal	Projected	increase in	average	rate of		degree
		population	n	attained	annual	population	annual	associate's	Projected	totals to
		with	with	by 2020 based		with	rate of	or bachelor's	annual rate	average annual
		associate's	Ś	on present	in population	associate's	change in	degree	of growth in	rate of change
	Projected U.S.	or bachelor's	or bachelor's	annual rate	between	or bachelor's	population	attainment	degree totals,	in population
	population in	degree	degree	of increase	2014 and	degree,	from 2014 to	from 2014	2014 - 2020	from 2014 to 2020
Group	2020	in 2020	in 2020	from 2014	2020 (%)	2014-2020	2020 (%)	to 2020 (%)	(%)	(%)
U.S. population	46,889,936	21,645,369	46.2	76.9	601,781	556,973	1.4	0.65	3.0	2.2:1
African American ^a	6,618,002	2,080,521	31.4	52.4	158,778	73,095	2.8	0.41	4.5	1.6:1
Men	3,299,651	814,423	24.7	41.1	866'86	30,243	3.7	0.21	4.8	1.3:1
Women	3,318,351	1,247,726	37.6	62.7	59,780	39,791	2.0	0.58	3.9	2.0:1
American	379,957	83,962	22.1	36.8	15,789	4,026	5.5	0.19	6.7	1.2:1
Indian/Alaska										
Native ^b										
Men	193,330	35,738	18.5	30.8	8,654	1,828	6.1	0.16	7.4	1.2:1
Women	186,627	48,052	25.7	42.9	7,149	2,169	5.0	0.23	6.2	1.2:1
Asian ^c	3,310,325	2,277,592	8.89	114.7	72,552	51,660	2.5	90.0	2.6	1.0:1
Men	1,621,058	1,071,405	66.1	110.2	42,725	27,929	3.1	-0.02	3.1	1.0:1
Women	1,689,267	1,202,798	71.2	118.7	29,827	23,166	2.0	0.13	2.2	1.1:1
Hispanic ^d	9,939,246	2,559,237	25.7	42.9	248,533	118,086	2.9	0.64	6.4	2.2:1
Men	5,292,394	1,134,351	21.4	35.7	144,761	55,060	3.3	0.54	8.9	2.1:1
Women	4,646,852	1,403,378	30.2	50.3	103,772	59,441	2.6	0.70	5.7	2.2:1
White	25,287,348	13,698,069	54.2	90.3	108,169	246,801	0.4	92.0	2.0	4.6:1
Men	12,866,714	6,184,120	48.1	80.1	66,748	111,798	0.5	0.64	2.0	3.8:1
Women	12,420,634	7,509,033	60.5	100.8	41,421	134,184	0.3	0.90	2.0	5.9:1

Includes all Black non-Hispanic population ages 25–34. bIncludes all American Indians and Alaska Natives non-Hispanic population ages 25–34. cIncludes Chinese, Japanese, other AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-34. Does not include two major races, three or more races. *Includes all White non-Hispanic Asian or Pacific Islander population ages 25-34. Does not include other race, not elsewhere categorized (nec), two major races, three or more major races. dIncludes White, Black, population ages 25-34.

Table E3 Effort Required to Achieve Degree Attainment Goal, Ages 25-34

Group	Projected degrees required among U.S. population to be at roughly 60% in 2020	Additional associate's or bachelor's degrees beyond projected number among U.S. population required to reach 60% attainment by 2020	Estimated additional associate's or bachelor's degrees needed above the number in 2014 for U.S. population to reach 60% by 2020	Percentage increase required from current year (2014) associate's or bachelor's degrees to reach 60% by 2020 among U.S. population	Average annual change in rate of degree attainment required from 2014 for U.S. population to reach 60% attainment, 2014–2020 (%)	Estimated additional percentage increase in degree attainment needed beyond the year 2020 to reach 60% attainment
U.S. population	28,133,962	6,488,593	9,830,432	53.7	3.0	30.0
African American ^a	3,970,801	1,890,280	2,328,853	141.8	5.2	90.9
Men	1,979,791	1,165,367	1,346,824	212.8	6.1	143.1
Women	1,991,011	743,284	982,030	97.3	4.3	59.6
American	227,974	144,012	168,168	281.2	6.5	171.5
Indian/Alaska						
Native ^b						
Men	115,998	80,260	91,228	368.3	7.1	224.6
Women	111,976	63,924	76,940	219.6	5.9	133.0
Asian ^c	1,986,195	d	d	d	d	d
Men	972,635	d	d	d	d	d
Women	1,013,560	d	d	d	d	d
Hispanice	5,963,548	3,404,310	4,112,827	222.2	6.3	133.0
Men	3,175,436	2,041,086	2,371,448	295.0	7.0	179.9
Women	2,788,111	1,384,733	1,741,378	166.4	5.7	98.7
White ^f	15,172,409	1,474,340	2,955,149	24.2	1.7	10.8
Men	7,720,028	1,535,909	2,206,698	40.0	2.6	24.8
Women	7,452,380	d	748,450	11.2	0.8	d

Table E4 Current Population and Degree Attainment Status, Ages 25-64

Group	U.S. population in 2014	U.S. population with associate's and/ or bachelor's degree in 2014	Percentage of U.S. population with associate's or bachelor's degree in 2014
U.S. population	167,593,630	67,741,740	40.4
African American ^a	20,625,035	6,045,661	29.3
Men	9,677,566	2,391,462	24.7
Women	10,947,469	3,654,199	33.4
American Indian/Alaska Native ^b	1,085,821	256,707	23.6
Men	526,029	106,434	20.2
Women	559,792	150,273	26.8
Asian ^c	9,915,284	6,025,788	60.8
Men	4,614,565	2,824,398	61.2
Women	5,300,719	3,201,390	60.4
Hispanic ^d	26,294,580	5,550,903	21.1
Men	13,360,946	2,467,322	18.5
Women	12,933,634	3,083,581	23.8
White ^e	105,869,394	48,371,917	45.7
Men	52,737,247	22,530,188	42.7
Women	53,132,147	25,841,729	48.6

Table E5 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2025, Ages 25-64

				Projected percentage of 60% goal attained by		Projected annual increase	Projected	Projected average annual	Projected	Ratio of projected average annual rate of change in degree
		Projected U.S.	Projected	2025 based on	Projected	in population	average	rate of change	annual rate of	Ţ
		population	percentage	present	annua	with	annual	in associate's	growth in	annual rate of
		with	with	annual	increase	associate's	rate of change	or bachelor's	degree	change in
	Projected U.S.	associate's	associate's	rate of	in population	or bachelor's	in population	degree from	totals,	population
	population	or bachelor's	or bachelor's	increase	between 2014	degree,	from 2014 to	2014 to 2025	2014 - 2025	from 2014
Group	in 2025	degree, 2025	degree in 2025	from 2014	and 2025	2014-2025	2025 (%)	(%)	(%)	to 2025 ^a
U.S. population	175,664,097	76,662,771	43.6	72.7	733,679	811,003	0.44	0.29	1.2	2.7:1
African American ^b	22,668,934	7,046,110	31.1	51.8	185,809	90,950	0.90	0.16	1.5	1.7:1
Men	10,891,881	2,742,678	25.2	42.0	110,392	31,929	1.14	0.04	1.3	1.2:1
Women	11,777,053	4,279,852	36.3	9.09	75,417	56,878	69.0	0.27	1.6	2.3:1
American	1,286,130	298,138	23.2	38.6	18,210	3,766	1.68	-0.04	1.5	0.9:1
Indian/Alaska										
$Native^c$										
Men	636,614	121,265	19.0	31.7	10,053	1,348	1.91	-0.11	1.3	0.7:1
Women	649,516	176,804	27.2	45.4	8,157	2,412	1.46	0.03	1.6	1.1:1
Asian ^d	12,701,787	8,339,213	65.7	109.4	253,318	210,311	2.55	0.44	3.5	1.4:1
Men	6,008,647	3,876,985	64.5	107.5	126,735	95,690	2.75	0.30	3.4	1.2:1
Women	6,693,140	4,456,536	9.99	111.0	126,584	114,104	2.39	0.56	3.6	1.5:1
Hispanic	35,193,968	8,401,640	23.9	39.8	809,035	259,158	3.08	0.25	4.7	1.5:1
Men	18,287,515	3,705,041	20.3	33.8	447,870	112,520	3.35	0.16	4.6	1.4:1
Women	16,906,453	4,655,215	27.5	45.9	361,165	142,876	2.79	0.34	4.6	1.7:1
$\mathrm{White}^{\mathrm{f}}$	99,666,658	49,973,138	50.1	83.6	-563,885	145,566	-0.53	0.40	0.3	-0.6:1
Men	49,970,287	22,735,495	45.5	75.8	-251,542	18,664	-0.48	0.25	0.1	-0.2:1
Women	49,696,371	27,247,989	54.8	91.4	-312,343	127,842	-0.59	0.56	0.5	-0.8:1

A negative ratio value denotes a decrease in the population compared to an increase in total degrees. Includes all Black non-Hispanic population ages 25-64. Includes all American Indians and Alaska Natives non-Hispanic population ages 25-64. ^dIncludes Chinese, Japanese, other Asian or Pacific Islander population ages 25-64. Does not include other race, not elsewhere categorized (nec), two major races, three or more major races. eIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population ages 25-64. Does not include two major races; three or more races. fincludes all White non-Hispanic population ages 25-64.

Table E6 Effort Required to Achieve Degree Attainment Goal, Ages 25-64

Group	Projected degrees required among U.S. population to be at roughly 60% in 2025	Additional associate's or bachelor's degrees beyond projected number among U.S. population required to reach 60% attainment by 2025	Estimated additional associate's or bachelor's degrees needed above the number in 2014 for the U.S. population to reach 60% by 2025	Percentage increase required from current year (2014) associate's or bachelor's degrees to reach 60% by 2025 among U.S. population	Average annual change in rate of degree attainment required from 2014 for U.S. population to reach 60% attainment, 2014–2025 (%)	Estimated additional percentage increase in degree attainment needed beyond the year 2025 to reach 60% attainment
U.S. population	105,398,458	28,735,687	37,656,718	55.6	1.8	37.5
African American ^a	13,601,360	6,555,250	7,555,699	125.0	2.8	93.0
Men	6,535,129	3,792,450	4,143,667	173.3	3.2	138.3
Women	7,066,232	2,786,379	3,412,033	93.4	2.4	65.1
American	771,678	473,540	514,971	200.6	3.3	158.8
Indian/Alaska						
Native ^b						
Men	381,968	260,703	275,534	258.9	3.6	215.0
Women	389,710	212,905	239,437	159.3	3.0	120.4
Asian ^c	7,621,072	d	1,595,284	d	d	d
Men	3,605,188	d	780,790	d	d	d
Women	4,015,884	d	814,494	d	d	d
Hispanic ^e	21,116,381	12,714,741	15,565,478	280.4	3.5	151.3
Men	10,972,509	7,267,468	8,505,187	344.7	3.8	196.2
Women	10,143,872	5,488,657	7,060,291	229.0	3.3	117.9
White ^f	59,799,995	9,826,856	11,428,078	23.6	1.3	19.7
Men	29,982,172	7,246,678	7,451,984	33.1	1.6	31.9
Women	29,817,823	2,569,833	3,976,094	15.4	1.0	9.4

Table E7 Current Population and Degree Attainment Status, Ages 25-64

Group	U.S. population in 2014	U.S. population with a certificate, associate's degree, or bachelor's degree in 2014	Percentage with high-quality certificate, associate's degree, or bachelor's degree in 2014	Percentage with associate's or bachelor's degree in 2014	High-quality certificate attainment in 2016, % (SE) ^a
U.S. population	167,593,630	75,953,828	45.3	45.32	4.9
African American ^b	20,625,035	7,184,163	34.8	34.83	5.5
Men	9,677,566	3,049,536	31.5	31.51	6.8 (2.7)
Women	10,947,469	4,124,940	37.7	37.68	4.3 (1.3)
Hispanic ^c	26,294,580	7,139,096	27.2	27.15	6.0
Men	13,360,946	3,295,701	24.7	24.67	6.2 (2.2)
Women	12,933,634	3,846,665	29.7	29.74	5.9 (1.9)
White ^d	105,869,394	53,220,735	50.3	50.27	4.6
Men	52,737,247	25,325,262	48.0	48.02	5.3 (1.2)
Women	53,132,147	27,913,883	52.5	52.54	3.9 (1.2)

Note. See Appendix B for full methodology. Certificate attainment rates for Asians and American Indians are not available. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles .html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/; Lumina Foundation: Stronger Nation 2016.

^aCertificate rates for U.S. population, Whites, Blacks, and Hispanics were obtained from Lumina Foundation's Stronger Nation 2016 report. The gender breakdowns for each race group were obtained from NORC by request and include standard errors. These estimates were produced using the data collected on behalf of Lumina Foundation through the National Education and Employment Study. Because reliable high-quality certificate attainment estimates exist for only a single time point, certificate attainment growth cannot be estimated. Therefore the certificate attainment rate is left as a constant between 2014 and 2025, and no growth is projected. ^bIncludes all Black non-Hispanic population ages 25–64. ^cIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race not elsewhere categorized population ages 25–64. Does not include two major races; three or more races. ^dIncludes all White non-Hispanic population ages 25–64.

Table E8 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2025, Ages 25-64

Ratio of projected average annual rate of change in degree totals to average annual rate of change in population from 2014	2.5:1 1.6:1 1.1:1 2.1:1 1.4:1 1.3:1 1.5:1 -0.4:1 0.0:1
Projected average annual rate of change in associate's or bachelor's degree from 2014 to 2025 (%)	0.29 0.16 0.04 0.27 0.25 0.16 0.34 0.40 0.25
Projected average annual rate of change in associate's or bachelor's degree from 2014 to 2025 (%)	0.29 0.16 0.04 0.27 0.25 0.16 0.34 0.26 0.25
Projected average Projected average average rate of annual change in rate of associate's change in or bachelor population degree from 2014 to from 2014	0.44 0.90 1.14 0.69 3.08 3.35 2.79 -0.53 -0.48
õ	846,953 101,207 39,435 60,121 308,024 140,288 164,185 119,740 5,333
o l	733,679 116,392 75,417 809,035 447,870 361,165 d
	80.9 61.0 53.3 67.7 49.9 44.1 55.7 91.2 84.7
Projected percentage of population with certificate, associate's degree, or bachelor's degree in 2025	0.49 0.37 0.32 0.41 0.30 0.26 0.33 0.55 0.51
-	48.5 36.6 32.0 40.6 29.9 26.5 33.4 54.7 50.8
Projected Drojected population ages population certificate, associate's associate's degree, or degree, bachelor's or bachelor's degree, degree degree, associate's degree, bachelor's or bachelor's degree degree, bachelor's degree degr	85,270,312 8,297,435 3,483,326 4,786,266 10,527,355 4,838,867 5,652,695 54,537,871 25,383,920 25,383,920
Projected population in 2025	175,664,097 22,668,934 10,891,881 11,777,053 35,193,968 18,287,515 16,906,453 99,666,658 49,970,287
Group	U.S. population 175,664,097 African American ^a 22,668,934 Men 10,891,881 Women 11,777,053 Hispanic ^b 35,193,968 Men 18,287,515 Women 16,906,453 White ^c 99,666,658 Women 49,970,287

ion ages 25 - 64. Does not include two major races; three or more races. Includes all White non-Hispanic population ages 25 - 64. deroup has or will have met 60% by 2025, calculation Note. See Appendix B for full methodology. Certificate attainment rates for Asians and American Indians are not available. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/ *Includes all Black non-Hispanic population ages 25 – 64. *Includes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race not elsewhere categorized populadata/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/; Lumina Foundation: Stronger Nation 2016. not applicable.

Table E9 Effort Required to Achieve Degree Attainment Goal, Ages 25-64

Group	Projected degrees required to be at roughly 60% in 2025	Additional certificates, associate's degrees, or bachelor's degrees beyond projected number required to reach 60% attainment by 2025	Estimated additional certificates, associate's degrees, or bachelor's degrees needed above the number in 2014 to reach 60% by 2025	Percentage increase required from current year (2014) certificates, associate's degrees, or bachelor's degrees to reach 60% by 2025	Average annual change in rate of degree attainment required from 2014 to reach 60%, 2014–2025 (%)	Estimated additional percentage increase in degree attainment needed beyond the year 2025 to reachcenter 60%
U.S. population	105,398,458	20,128,147	29,444,630	38.8	1.3	23.6
African American ^a	13,601,360	5,303,925	6,417,197	89.3	2.3	63.9
Men	6,535,129	3,051,802	3,485,592	114.3	2.6	87.6
Women	7,066,232	2,279,966	2,941,292	71.3	2.0	47.6
Hispanic ^b	21,116,381	10,589,026	13,977,285	195.8	3.0	100.6
Men	10,972,509	6,133,642	7,676,808	232.9	3.2	126.8
Women	10,143,872	4,491,177	6,297,206	163.7	2.8	79.5
White ^c	59,799,995	5,262,124	6,579,260	12.4	0.9	9.6
Men	29,982,172	4,598,252	4,656,910	18.4	1.1	18.1
Women	29,817,823	d	1,903,940	6.8	0.7	d

Note. See Appendix B for full methodology. Certificate attainment rates for Asians and American Indians are not available. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles .html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/; Lumina Foundation: Stronger Nation 2016.

^aIncludes all Black non-Hispanic population ages 25–64. ^bIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race not elsewhere categorized population ages 25–64. Does not include two major races; three or more races. ^cIncludes all White non-Hispanic population ages 25–64. ^dGroup has or will have met 60% by 2025, calculation not applicable.

Appendix F: Comparison of Associate's Degree and Bachelor's Degree Attainment Estimates, 2014 and Projected 2020, Ages 25–34

Table F1 Current Population and Degree Attainment Status, Ages 25-34

Group	U.S. population with associate's and/or bachelor's degree in 2014	2014 associate's Total	2014 associate's percentage	Average yearly change in rate: associate's degrees, 2006 – 2014 (%)	2014 bachelor's total	2014 bachelor's percentage	Average yearly change in rate: bachelor's degrees, 2006 – 2014 (%)
U.S. population	18,303,530	3,841,619	21.0	0.08		79.0	0.57
African American ^a	1,641,948	473,775	28.9	0.08	1,168,173	71.1	0.33
Men	632,967	186,143	29.4	0.05	446,824	70.6	0.16
Women	1,008,981	287,632	28.5	0.11	721,349	71.5	0.48
American Indian/Alaska Nativeb	59,806	22,731	38.0	0.01	37,075	62.0	0.17
Men	24,770	9,737	39.3	0.13	15,033	60.7	0.03
Women	35,036	12,994	37.1	-0.09	22,042	62.9	0.32
Asian ^c	1,967,630	187,379	9.5	-0.04	1,780,251	90.5	0.10
Men	872,146	81,541	9.3	-0.02	790,605	90.7	-0.01
Women	1,063,800	105,838	9.9	-0.06	957,962	90.1	0.19
Hispanic ^d	1,850,721	593,208	32.1	0.21	1,257,513	67.9	0.43
Men	803,988	264,717	32.9	0.18	539,271	67.1	0.36
Women	1,046,733	328,491	31.4	0.23	718,242	68.6	0.46
White ^e	12,217,260	2,441,670	20.0	0.05	9,775,590	80.0	0.71
Men	5,513,330	1,126,347	20.4	0.07	4,386,983	79.6	0.57
Women	6,703,930	1,315,323	19.6	0.04	5,388,607	80.4	0.85

Note. See Appendix B for full methodology. The data for Whites and Blacks exclude Hispanic, and race combination is not included. Data are from U.S. Census Bureau; 2025 population is from National Population Projections 2014, Table 1, https://www.census.gov/population/projections/data/national/2014/downloadablefiles.html; American Community Survey 2014, IPUMS Online Tabulator, https://usa.ipums.org/usa/.

Table F2 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2020, Ages 25 - 34

						Total			
	Projected U.S.					projected			
	population	•					Total projected	Percentage	Percentage
	with					associate's	number of	of associate's	
	associate's					degrees	bachelor's		degrees out
	and/or	Projected	Projected	Projected	Projected	attained	degrees	of total	of total
	bachelor's	2020	2020	2020	2020	between	attained	degree	degree
	degree	associate's	associate's	bachelor's	bachelor's	2014	between 2014	0	
Group	in 2020	total	percentage	total	percentage	and 2020	and 2020	2014-2020	2014-2020
U.S. population	21,645,369	4,380,900	20.2		79.8	539,281	2,802,558	16.1	83.9
African American ^a	2,080,521	585,930	28.2	1,494,591	71.8	112,155	326,418	25.6	74.4
Men	814,423	237,423	29.2	577,001	70.8	51,280	130,177	28.3	71.7
Women	1,247,726	343,972	27.6	903,754	72.4	56,340	182,405	23.6	76.4
American	83,962	30,619	36.5	53,343	63.5	7,888	16,268	32.7	67.3
Indian/Alaska									
Native ^b									
Men	35,738	14,782	41.4	20,956	58.6	5,045	5,923	46.0	54.0
Women	48,052	15,909	33.1	32,144	66.9	2,915	10,102	22.4	77.6
Asian ^c	2,277,592	208,367	9.1	2,069,225	90.9	20,988	288,974	6.8	93.2
Men	1,071,405	95,343	8.9	976,062	91.1	13,802	185,457	6.9	93.1
Women	1,202,798	112,251	9.3	1,090,547	90.7	6,413	132,585	4.6	95.4
Hispanic ^d	2,559,237	826,048	32.3	1,733,190	67.7	232,840	475,677	32.9	67.1
Men	1,134,351	375,330	33.1	759,021	66.9	110,613	219,750	33.5	66.5
Women	1,403,378	444,820	31.7	958,558	68.3	116,329	240,316	32.6	67.4
White ^e	13,698,069	2,586,957	18.9		81.1	145,287	1,335,522	9.8	90.2
Men	6,184,120	1,212,992		4,971,128		86,645	584,145	12.9	87.1
Women	7,509,033	1,373,682	18.3	6,135,351	81.7	58,359	746,744	7.2	92.8

Table F3 Effort Required to Achieve Degree Attainment Goal, Ages 25-34

Group	Projected degrees required among U.S. population to be at roughly 60% in 2020	Total number of assoicate's degrees needed to reach 60% combined associate's and bachelor's attainment	Total number of bachelor's degrees needed to reach 60% combined associate's and bachelor's attainment	Percentage increasecenter required from 2014 associate's degrees to reach combined 60% by 2020 among U.S. population	Percentage increase required from current year bachelor's degrees or higher to reach combined 60% by 2020 among U.S. population
U.S. population	28,133,962	5,694,154	22,439,807	48.2	55.2
African American ^a	3,970,801	1,118,283	2,852,518	136.0	144.2
Men	1,979,791	577,154	1,402,637	210.1	213.9
Women	1,991,011	548,880	1,442,131	90.8	99.9
American	227,974	83,137	144,837	265.7	290.7
Indian/Alaska					
Native ^b					
Men	115,998	47,979	68,019	392.8	352.5
Women	111,976	37,072	74,904	185.3	239.8
Asian ^c	1,986,195	181,709	1,804,486	-3.0	1.4
Men	972,635	86,554	886,081	6.1	12.1
Women	1,013,560	94,591	918,969	-10.6	-4.1
Hispanic ^d	5,963,548	1,924,860	4,038,687	224.5	221.2
Men	3,175,436	1,050,676	2,124,760	296.9	294.0
Women	2,788,111	883,730	1,904,381	169.0	165.1
White ^e	15,172,409	2,865,394	12,307,014	17.4	25.9
Men	7,720,028	1,514,255	6,205,773	34.4	41.5
Women	7,452,380	1,363,318	6,089,062	3.6	13.0

Table F4 Current Population and Degree Attainment Status, Ages 25-64

Group	U.S. population with associate's or bachelor's degree in 2014	2014 associate's total	2014 associate's percentage	Average yearly change in rate of associate's degrees, 2006 – 2014 (%)	2014 bachelor's total	2014 bachelor's percentage	Average yearly change in rate of bachelor's degrees, 2006 – 2014 (%)
U.S. population	67,741,740	14,936,862	22.0	0.08	52,804,878	78.0	0.32
African American ^a	6,045,661	1,774,665	29.4	0.09	4,270,996	70.6	0.35
Men	2,391,462	681,732	28.5	0.02	1,709,730	71.5	0.21
Women	3,654,199	1,092,933	29.9	0.15	2,561,266	70.1	0.49
American	256,707	97,771	38.1	0.04	158,936	61.9	0.12
Indian/Alaska							
Native ^b							
Men	106,434	37,290	35.0	-0.10	69,144	65.0	0.10
Women	150,273	60,481	40.2	0.17	89,792	59.8	0.14
Asian ^c	6,025,788	698,813	11.6	-0.02	5,326,975	88.4	0.23
Men	2,824,398	289,512	10.3	-0.04	2,534,886	89.7	0.09
Women	3,201,390	409,301	12.8	0.00	2,792,089	87.2	0.37
Hispanic ^d	5,550,903	1,648,593	29.7	0.10	3,902,310	70.3	0.30
Men	2,467,322	712,277	28.9	0.07	1,755,045	71.1	0.20
Women	3,083,581	936,316	30.4	0.12	2,147,265	69.6	0.38
White ^e	48,371,917	10,378,772	21.5	0.10	37,993,145	78.5	0.41
Men	22,530,188	4,515,871	20.0	0.07	18,014,317	80.0	0.20
Women	25,841,729	5,862,901	22.7	0.14	19,978,828	77.3	0.61

Table F5 Projected Population and Progress Toward Achieving National Degree Attainment Goals by 2025, Ages 25-64

Group	Projected U.S. population with associate's and/or bachelor's degree in 2025	Projected 2025 associate's total	Projected 2025 associate's percentage	Projected 2025 bachelor's total	Projected 2025 bachelor's percentage	Total projected number of bachelor's degrees attained between 2014 and 2025	Percentage of associate's degrees out of total degree attainment, 2014–2025	Percentage of bachelor's degrees ou t of total degree attainment, 2014–2025
U.S. population	76,662,771	16,172,272	21.1	60,490,499	78.9	7,685,621	13.8	86.2
African American ^a	7,046,110	2,016,607	28.6	5,029,503	71.4	758,507	24.2	75.8
Men	2,742,678	781,837	28.5	1,960,841	71.5	251,111	28.5	71.5
Women	4,279,852	1,230,112	28.7	3,049,740	71.3	488,474	21.9	78.1
American	298,138	111,487	37.4	186,651	62.6	27,715	33.1	66.9
Indian/Alaska								
Native ^b								
Men	121,265	46,290	38.2	74,975	61.8	5,831	60.7	39.3
Women	176,804	65,423	37.0	111,381	63.0	21,589	18.6	81.4
Asian ^c	8,339,213	848,192	10.2	7,491,022	89.8	2,164,047	6.5	93.5
Men	3,876,985	361,719	9.3	3,515,265	90.7	980,379	6.9	93.1
Women	4,456,536	485,826	10.9	3,970,710	89.1	1,178,621	6.1	93.9
Hispanic ^d	8,401,640	2,595,200	30.9	5,806,440	69.1	1,904,130	33.2	66.8
Men	3,705,041	1,149,147	31.0	2,555,894	69.0	800,849	35.3	64.7
Women	4,655,215	1,434,990	30.8	3,220,225	69.2	1,072,960	31.7	68.3
White ^e	49,973,138	10,119,933	20.3	39,853,205	79.7	1,860,060	-16.2	116.2
Men	22,817,093	4,506,058	19.7	18,311,034	80.3	296,717	-3.4	103.4
Women	27,247,989	5,621,554	20.6	21,626,435	79.4	1,647,607	-17.2	117.2

Table F6 Effort Required to Achieve Degree Attainment Goal, Ages 25-64

Group	Projected degrees required among U.S. population to be at roughly 60% in 2025	Total number of associate's degrees needed to reach 60% combined associate's and bachelor's attainment	Total number of bachelor's degrees needed to reach 60% combined associate's and bachelor's attainment	Percentage increase required from 2014 associate's degrees to reach 60% by 2025 among U.S. population	Percentage increase required from current year bachelor's degree or higher to reach 60% by 2025 among U.S. population
U.S. population	105,398,458	22,234,163	83,164,295	48.9	57.5
African American ^a	13,601,360	3,892,729	9,708,631	119.4	127.3
Men	6,535,129	1,862,926	4,672,202	173.3	173.3
Women	7,066,232	2,030,971	5,035,261	85.8	96.6
American	771,678	288,564	483,114	195.1	204.0
Indian/Alaska					
Native ^b					
Men	381,968	145,806	236,162	291.0	241.6
Women	389,710	144,205	245,505	138.4	173.4
Asian ^c	7,621,072	775,149	6,845,924	10.9	28.5
Men	3,605,188	336,361	3,268,827	16.2	29.0
Women	4,015,884	437,789	3,578,095	7.0	28.2
Hispanic ^d	21,116,381	6,522,683	14,593,698	295.7	274.0
Men	10,972,509	3,403,208	7,569,301	377.8	331.3
Women	10,143,872	3,126,892	7,016,980	234.0	226.8
White ^e	59,799,995	12,109,945	47,690,050	16.7	25.5
Men	29,982,172	5,921,062	24,061,110	31.1	33.6
Women	29,817,823	6,151,739	23,666,084	4.9	18.5

Appendix G: Racial/Ethnic Representation by Institutional Selectivity

Table G1

	Total	African American ^a	American Indian/ Alaska Native ^b	Asian ^c	Hispanic ^d	Whites ^e	Other ^f
U.S. pop. ages 18 – 24	30,115,633	4,343,216	280,216	1,763,450	6,488,473	16,512,506	727,773
Row percentage		14	1	0	22	55	2
Total	2,340,576	302,553	15,807	147,450	394,405	1,251,240	229,121
Row percentage		13	1	6	17	53	10
Column percentage		100	100	100	100	100	100
Most competitive	129,276	7,090	296	19,081	12,884	68,627	21,298
Row percentage		5	0	15	10	53	16
Column percentage		2	2	13	3	5	9
Highly competitive	169,983	7,758	326	19,129	17,649	104,656	20,465
Row percentage		5	0	11	10	62	12
Column percentage		3	2	13	4	8	9
Very competitive	403,016	27,820	1,674	32,441	44,308	255,844	40,929
Row percentage		7	0	8	11	63	10
Column percentage		9	11	22	11	20	18
Competitive	588,375	74,932	3,279	30,271	77,772	345,156	56,965
Row percentage		13	1	5	13	59	10
Column percentage		25	21	21	20	28	25
Less competitive	116,385	28,864	605	2,817	19,564	54,587	9,948
Row percentage		25	1	2	17	47	9
Column percentage		10	4	2	5	4	4
Noncompetitive 4-year	34,521	7,508	485	2,099	7,250	13,938	3,241
Row percentage		22	1	6	21	40	9
Column percentage		2	3	1	2	1	1
2-year colleges	864,499	141,073	8,657	39,513	207,728	394,494	73,034
Row percentage		16	1	5	24	46	8
Column percentage		47	55	27	53	32	32

Note. Full-time, first-time, first-year, degree-seeking undergraduates. Data on U.S. population ages 18–24 are from the U.S. Census Bureau. Data on full-time, first-time, first-year, degree-seeking undergraduates across race are from the Intergrated Postsecondary Education Data System (IPEDS) Fall 2014. Selectivity ratings are from *Barron's* 2016.

^aIncludes all Black non-Hispanic population. ^bIncludes all American Indians and Alaska Natives non-Hispanic population. ^cIncludes Chinese, Japanese, other Asian or Pacific Islander population. Does not include other race, not elsewhere categorized (nec), two major races, three or more major races. ^dIncludes White, Black, AIAN, Chinese, Japanese, other Asian or Pacific Islander, other race nec population. Does not include two major races; three or more races. ^cIncludes all White non-Hispanic population. ^fIncludes two or more races, nonresident aliens, and race/ethnicity unknown.

Suggested citation:

Nettles, M. T. (2017). *Challenges and opportunities in achieving the national postsecondary degree attainment goals* (Research Report No. RR-17-38). Princeton, NJ: Educational Testing Service. https://doi.org/10.1002/ets2.12141

Action Editor: James Carlson

Reviewers: María Elena Oliveri, Richard Fry, and Cathy Wendler

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